Roadstar®

Service Manual - DVD-5102SPK

DVD-5102SPK

MODEL NO: DVD-5102PSPK

SERVICE MANUAL

Technical specification.....1
Safety & Warning.....2
Troubleshooting.....3
Block Diagram.....4
Main Board view .....5~10
Control Board view.....11~12
Power Board view.....13~14
Electric Parts List.....15~19
Machine Parts List.....20~21
Exploded View./View list.....22~24

Technical Specifications

DVD setction

Laser type	.... Semiconductor laser, Wavelength 650 nm
Signal system	..... PAL / NTSC
Video format	..... 16 : 9
Video output level	.....1 Vp-p (75 ohm)
Video Y output level	.....1 Vp-p (75 ohm)
Video C output level	.... 286 mVp-p (75 ohm)
Audio frequency response	.... 4 Hz - 22 kHz (48 kHz)
	....4 Hz - 44 kHz (96 kHz)
Digital output	.... Coaxial & Optical

Tuner section

Tuning range	....FM 87.5 - 108 MHz (100 kHz steps)
	....AM 522 - 1620 kHz (9 kHz steps)
26 dB quieting sensitivity	....FM 20 dB
26 dB quieting sensitivity	....AM 3162 uV/m
Image rejection radio	....FM 25 dB
	....AM 28 dB
IF rejection radio	....FM 60 dB
	....AM 24 dB
Signal-to-Noise ratio	....FM 60 dB
	....AM 40 dB
AM suppression ratio	....FM 30 dB
Harmonic distortion	....FM mono 3%
	....FM stereo 3%
	AM 5%
Frequency response	FM 180 Hz - 10 kHz / +/-6 dB
Stereo separation	FM 26 dB (1 kHz)
Stereo threshold	FM23.5 dB

Amplifier section

Output power - Stereo mode (DIN)	2 x 15 W
- Surround mode (1 kHz)	15W RMS/channel
Total harmonic distortion	10% at rated power (1 kHz)
Frequency response	180 Hz - 14 kHz / +/-1 dB
Signal-to-Noise ratio	> 65 dB (CCIR)
Input sensitivity	400 mV

General

Power supply	230V / 50 Hz
Power consumption	160 W
Dimension	W430 x H69 x D359 mm
Weight	7.1 kg

Speaker

System	1-way shielded
Impendance	8 ohm
Speaker drivers	3" full range
Dimension	W90 x H130 x D100 mm
Weight	0.45 kg/each

Subwoofer

Subwoofer	5 1/4"
Output power	25 W
Impendance	4 ohm
Dimension	W200 x H300 x D300 mm
Weight	kg

Specifications subject to change without prior notice

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.
To avoid electrical shock, do not open the cabinet.
Refer serving to qualified personnel only.

Mains cord must only be changed at qualified service shop.

- This appliance is classified as a CLASS 1 LASER product.
- The CLASS 1 LASER PRODUCT MARKING is located on the rear panel.
- This product contains a low power laser device. To ensure continued safety do not remove any cover or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel only.

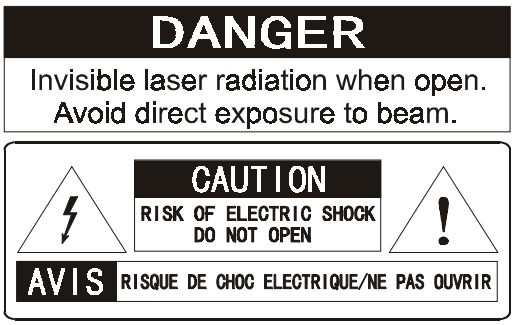
This symbol is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product' s encasement that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the applicance.

CAUTION

The use of optical instrument with this product will increse eyes hazard. As the laser beam used in this CD/DVD player is harmful to eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

The following marking is printed on the rear panel.



Troubleshooting

If you experience any of the following difficulties while using the system, use this troubleshooting guide to help you remedy the problem. Should any problem persist, consult your nearest service center.

No power
- Is the power cord firmly plugged into the power outlet?
- One of the safety mechanisms may be operating. In this event, unplug the player from the power outlet briefly and then plug it in again.

No picture
- Check that the system is connected securely.
- The video connecting cord is damaged. Replace it with a new one.
- Make sure you connect the system to video input connector on the TV.
- Make sure you turn on the TV.
- Make sure you select the video input on the TV so that you can view the pictures from this system.

The picture noise appears
- Clear the disc.
- If video from this system has to go through your VCR to get to your TV, the copy-protection applied to some DVD programs could affect picture quality. If you still experience problems after checking your connections, please try connecting your DVD system directly to your TV' s S-Video input, if your TV is equipped with this input.

The aspect ratio of the screen cannot be changed even though you set "TV DISPLAY" in the SETUP menu when you play a wide picture.
- The aspect rate is fixed on your DVD disc.
- If you connect the system with the S-Video cable, connect directly to the TV. Otherwise, you may not change the aspect rate.
- Depending on the TV, you may not change the aspect rate.

There is no sound or only a very low-level sound is heard.
- Check that the speakers and components are connected securely.
- Make sure that you have selected the correct source on the system.
- The protective device on the system has been activated because of a short circuit. Turn off the system, eliminate the short-circuit problem and turn on the power again.
- The audio connecting cord is damaged. Replace it with a new one.
- The system is in pause mode or in slow-motion play mode, or fast forward or fast reverse is performed. Press **PLAY/PAUSE ►/II** to return to normal play mode.
- Check the speaker settings

The left and right sounds are unbalanced or reversed
- Check that the speakers and components are connected correctly and securely.
- Adjust front balance parameter using **SELECT** and **VOLUME** +/-.

Severe hum or noise is heard
- Check that the speakers and components are connected securely.
- Check that the connecting cords are away from a transformer or motor, and at least 3 meters away from a TV set or fluorescent light.
- Move your TV away from the audio components.
- The plugs and jacks are dirty. Wipe them with a cloth slightly moistened with alcohol.
- Clear the disc.

The sound loses stereo effect when you play a Video CD or a CD
- Set the Audio mode to " STEREO" in the SETUP menu.
- Make sure you connect the system appropriately.

The surround effect is difficult to hear when you are playing a Dolby Digital sound track
- Check the speaker connections.
- Depending on the DVD disc, the output signal may not be the entire 5.1 channel but monaural or stereo even if the sound track is recorded in Dolby Digital format.

The sound comes from the center speaker only
- Depending on the disc, the sound may come from the center speaker only.

No sound is heard from the center speaker
- Make sure the Center is set to " ON" in SETUP menu.
- You may set the listening mode to Dolby Pro Logic Phantom .
- Adjust the speaker volume.

No sound or only a very low-level sound is heard from the rear speakers
- Make sure the Rear is set to " ON" in SETUP menu.
- Adjust the speaker volume.

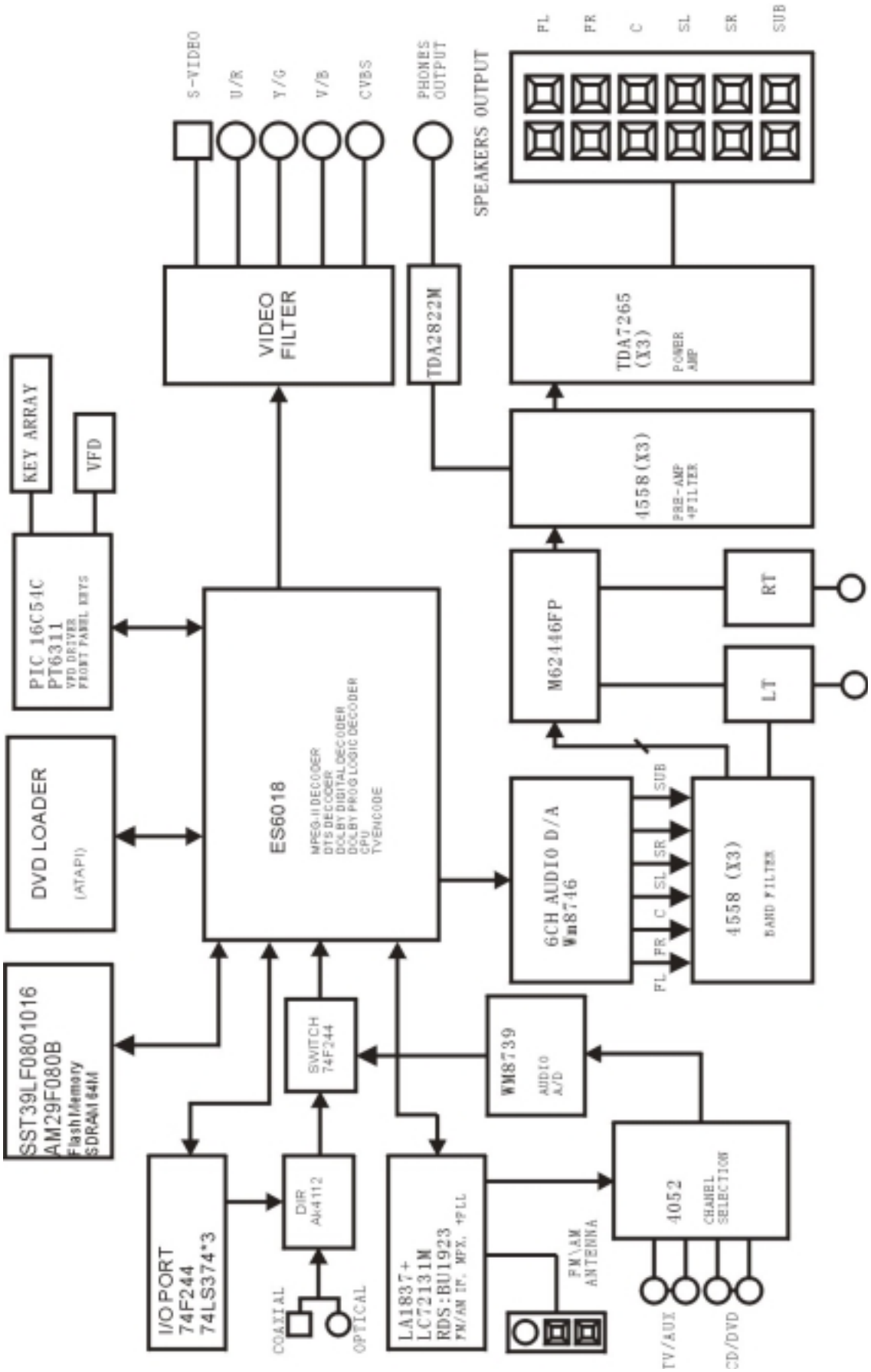
The language for the subtitles cannot be changed when you play a DVD
- Multilingual subtitles are not recorded on the DVD.
- Changing the language for the subtitles is prohibited on the DVD.

The subtitles cannot be turned off when you play a DVD
- Depending on the DVD, you may not be able to turn the subtitles off.

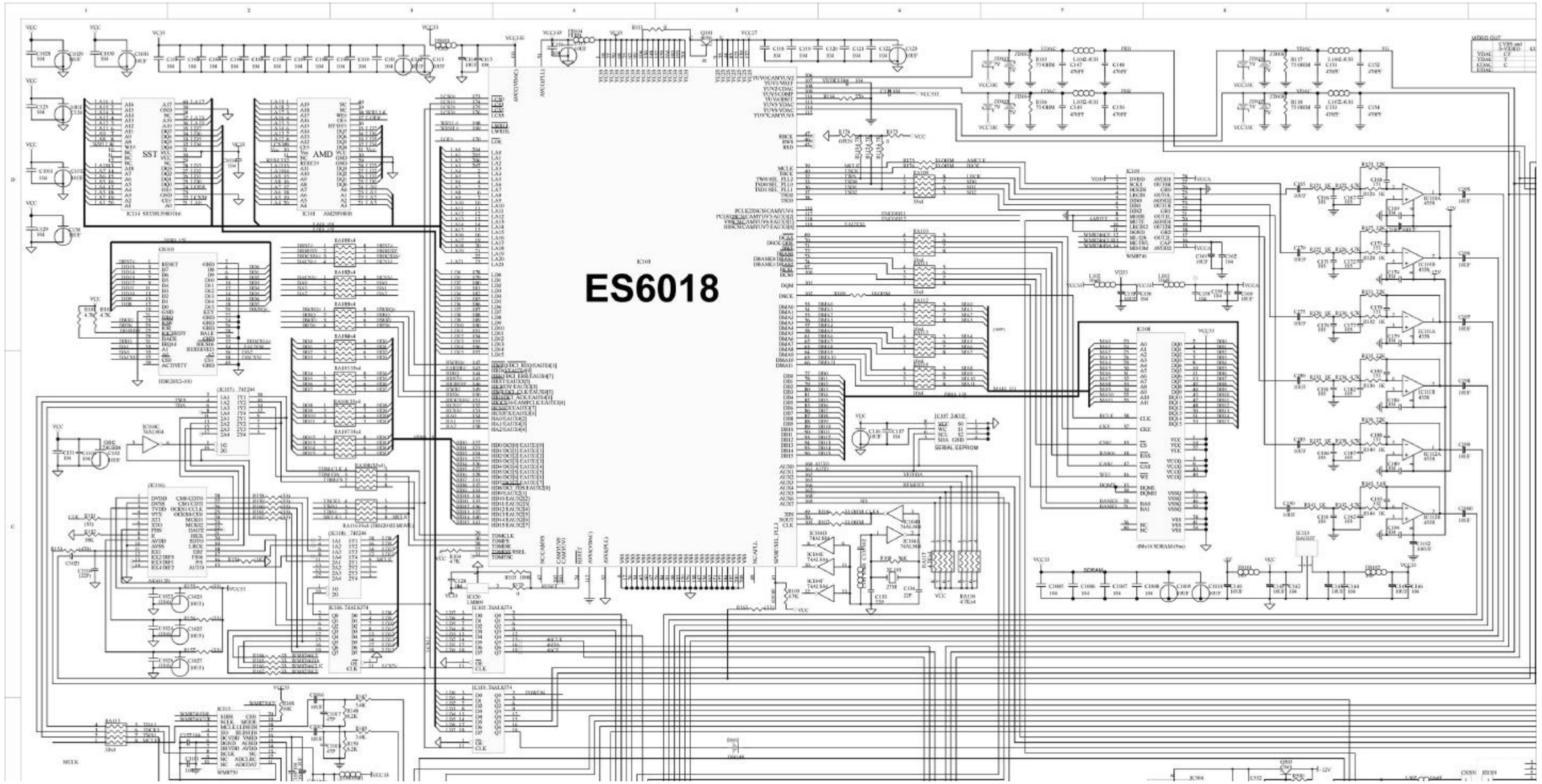
The angles cannot be changed when you play a DVD
- Multi-angles are not recorded on the DVD.
- Change the angles when the angle mark appears on the TV screen.
- Changing the angles is prohibited on the DVD.

The system does not operate properly
- Static electricity, etc., may affect the system' s operation. Press the **POWER** button to turn off, then press again to turn on.

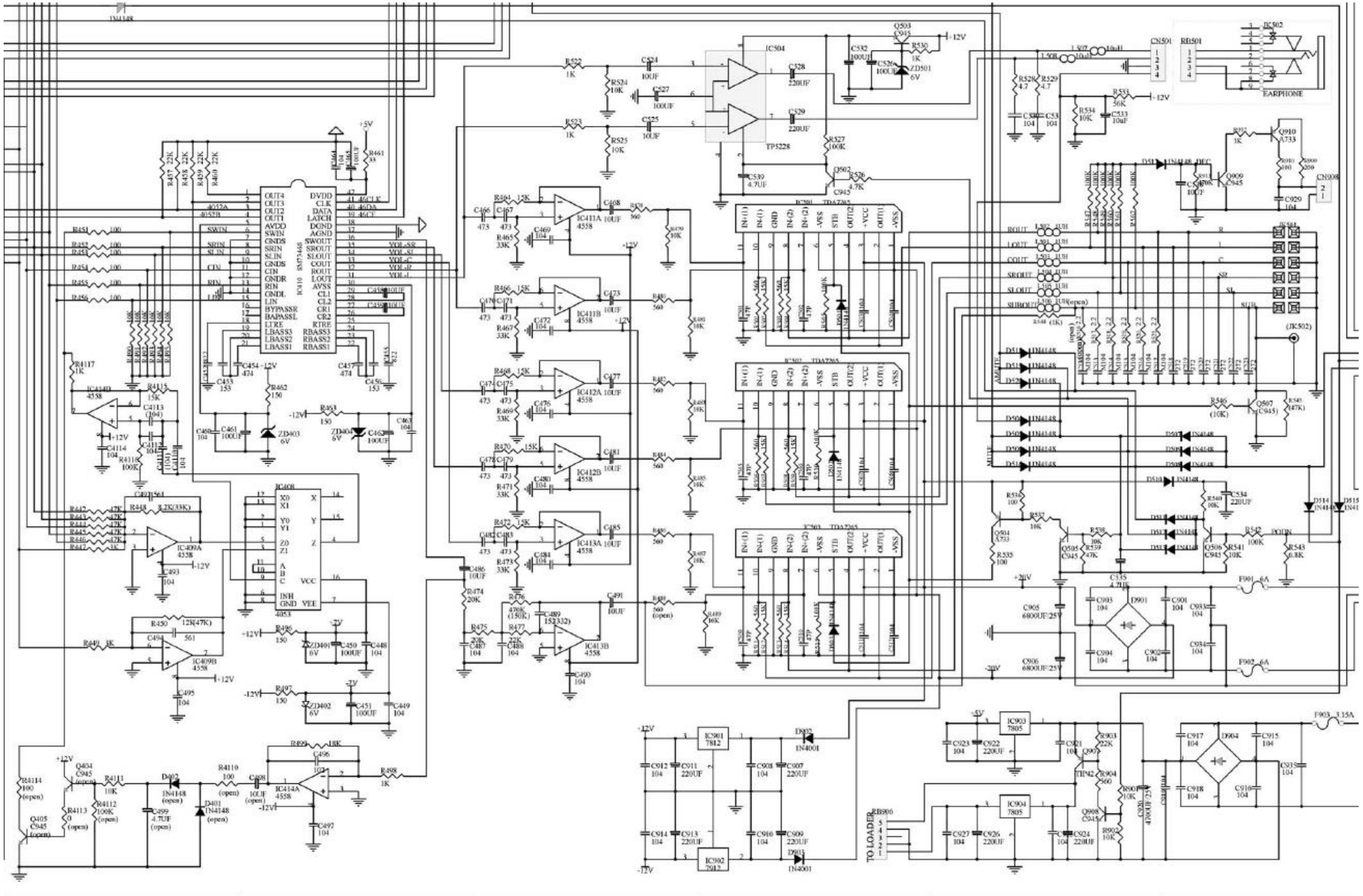
BLOCK DIAGRAM SET



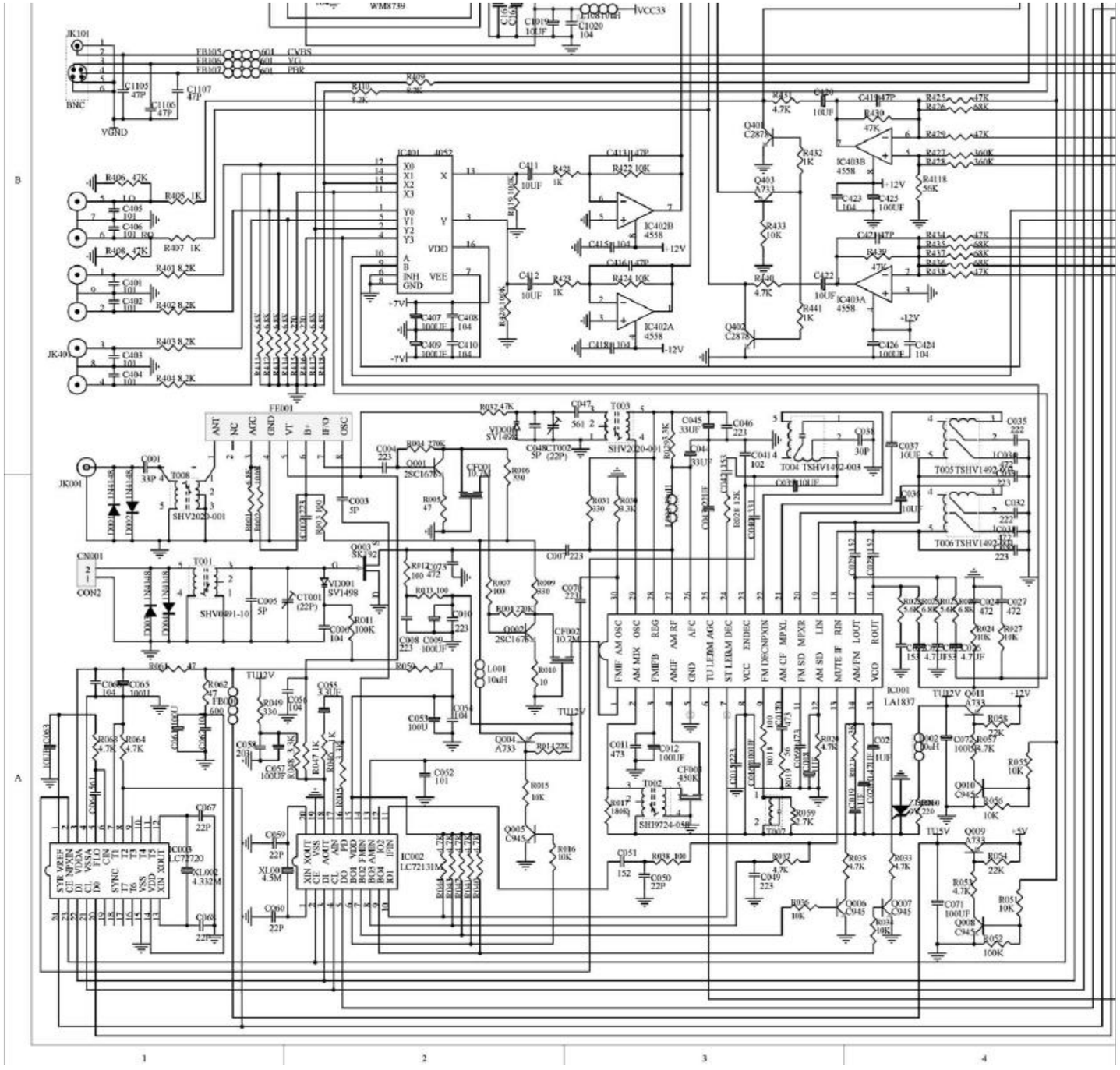
CIRCUIT DIAGRAM - MAIN BOARD (MEPG)


ES6018
IC109
SST
AMD
IC114 SST39SF040
IC111 AM29F040
IC110
IC108
IC107 24C02
SERIAL EEPROM
IC106 74ALS374
IC105 74ALS374
IC115 74ALS374
IC116 74ALS374
IC117 74ALS374
IC118 74ALS374
IC136 74F244
IC113 74F244
IC103 74ALS04
IC104 74ALS04
IC112 74ALS04
IC101 74ALS04
IC102 74ALS04
IC104 74ALS04
IC104 74ALS04
IC104

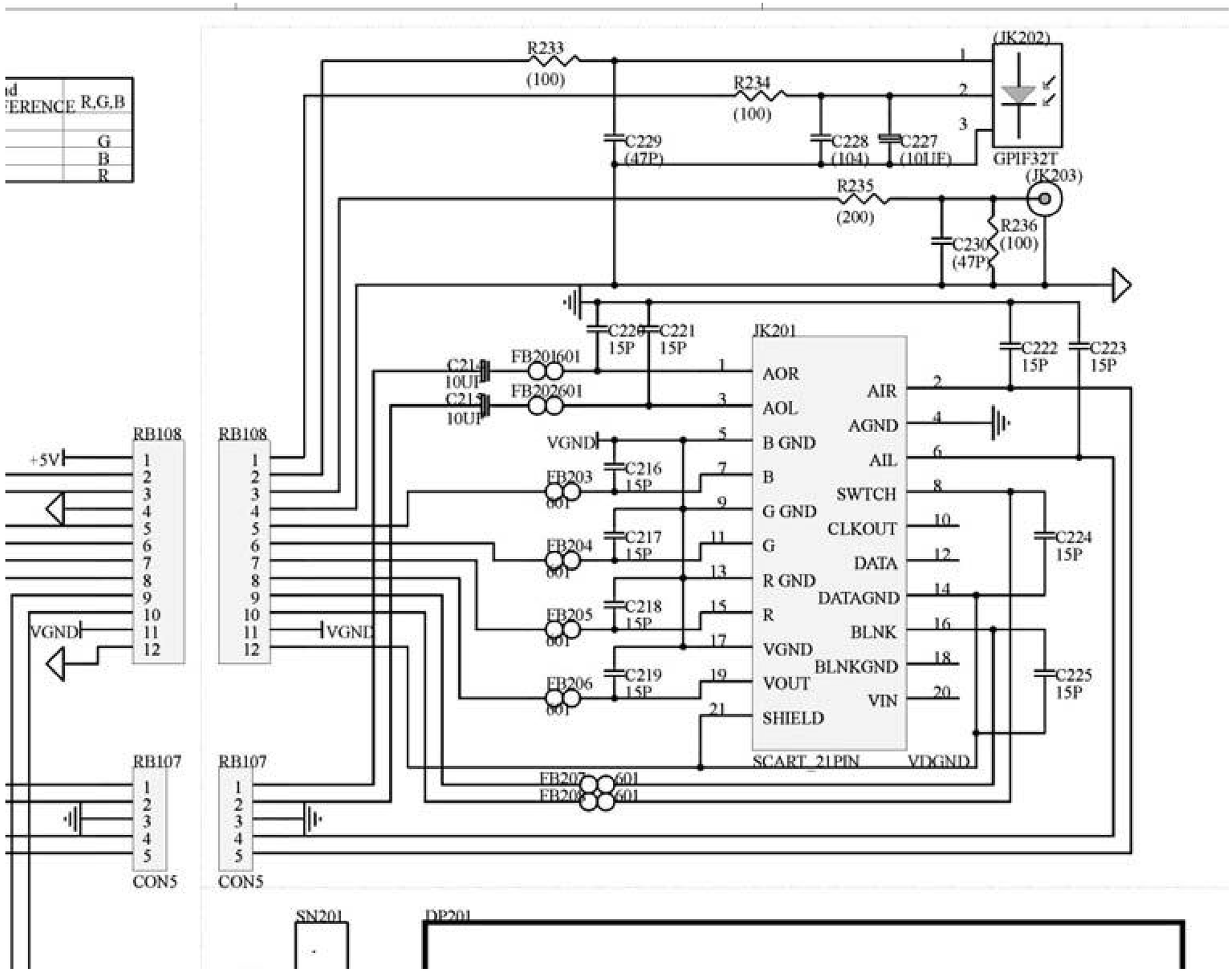
CIRCUIT DIAGRAM - MAIN BOARD (AMPLIFIER SECTION)



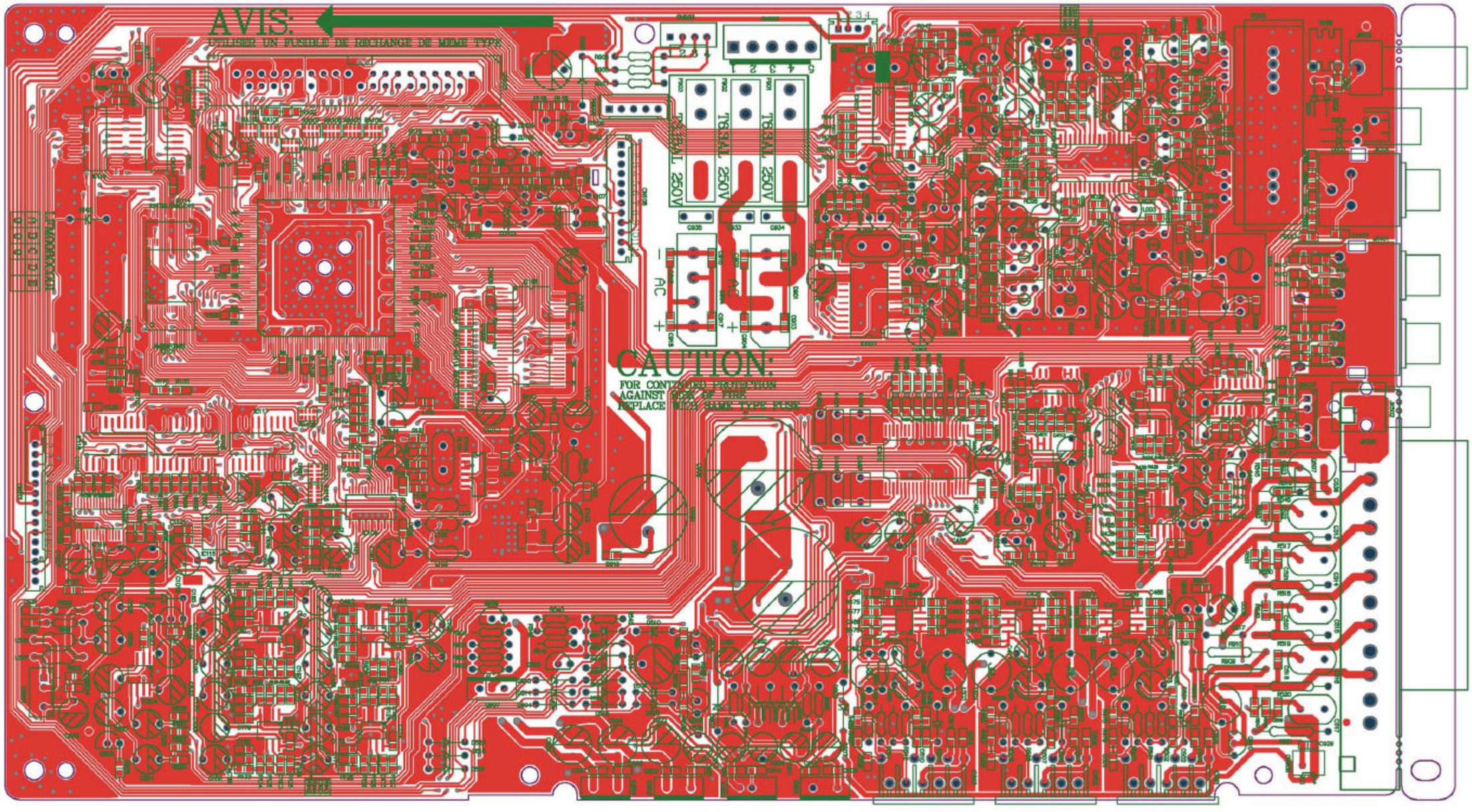
CIRCUIT DIAGRAM - MAIN BOARD (TUNER SECTION)



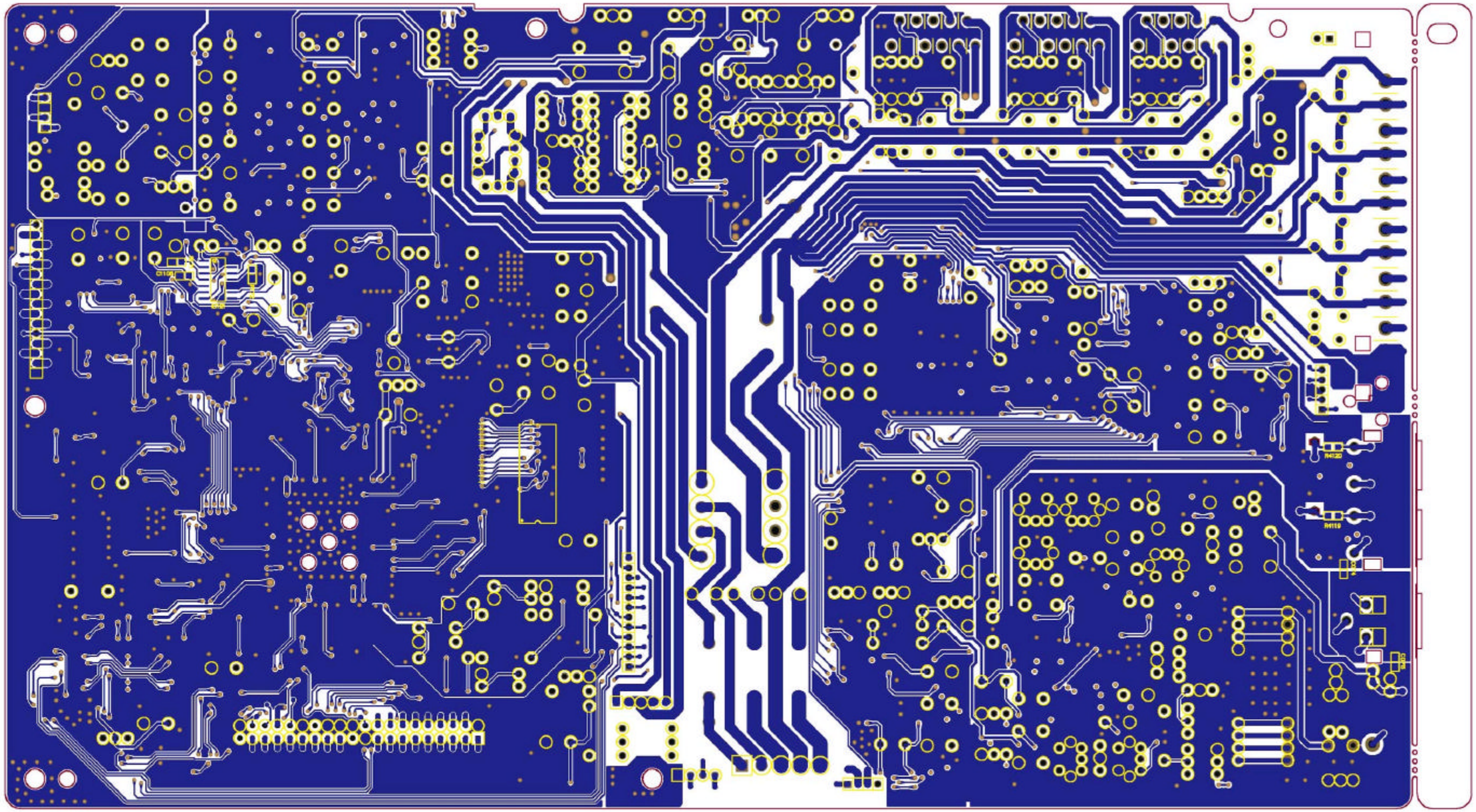
CIRCUIT DIAGRAM - MAIN BOARD (SCART SECTION)



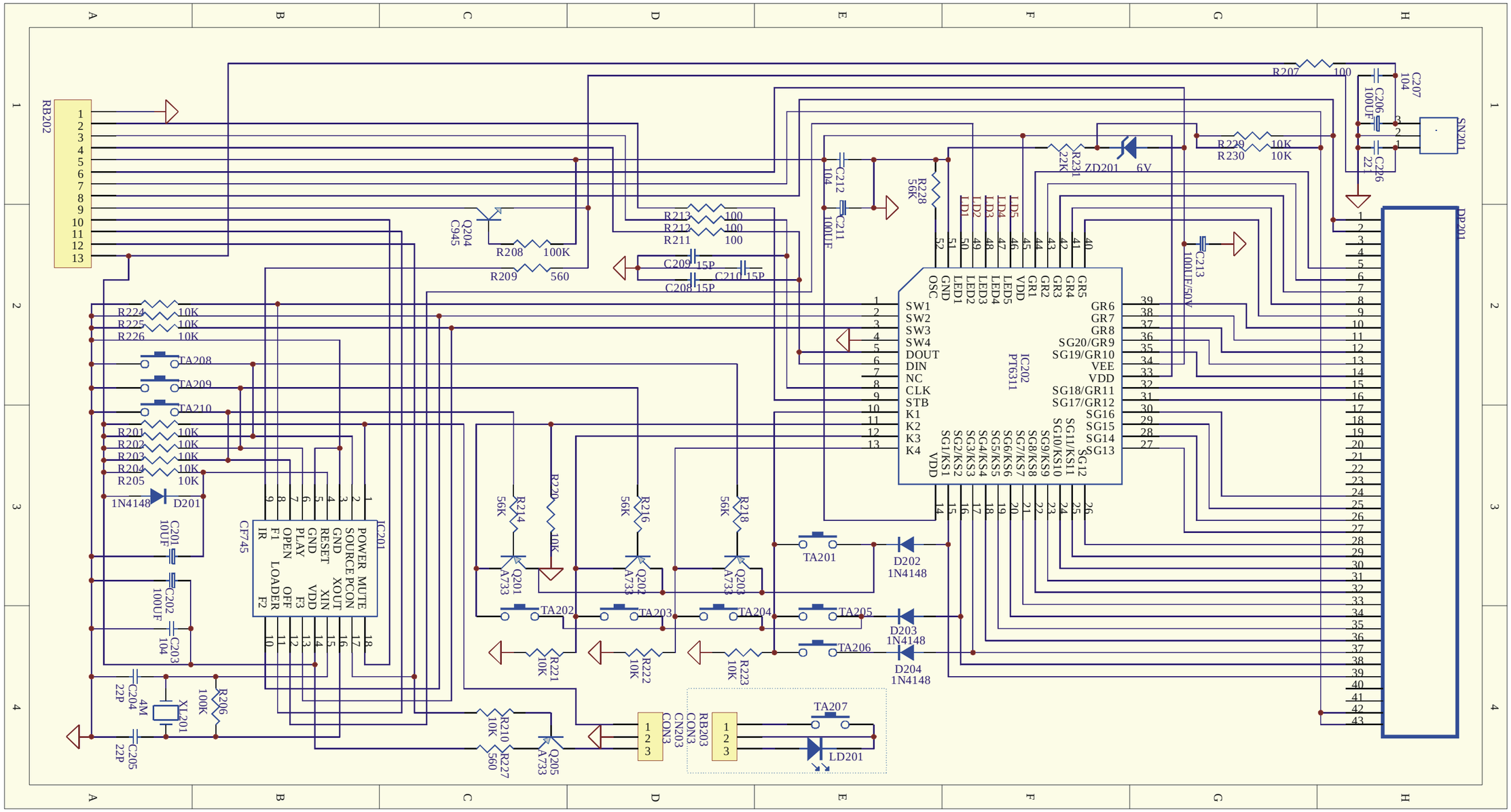
COMPONENT LAYOUT-MAIN BOARD(TOP VIEW)



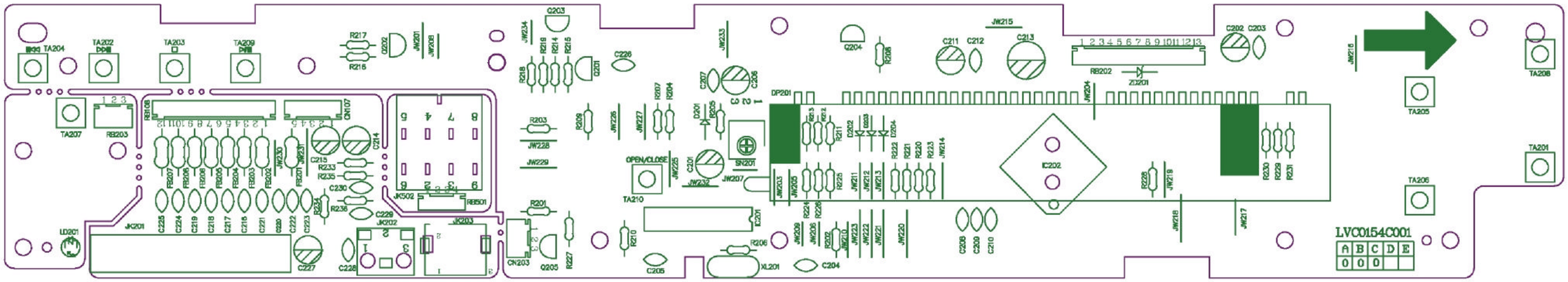
COMPONENT LAYOUT-MAIN BOARD(BOTTOM VIEW)



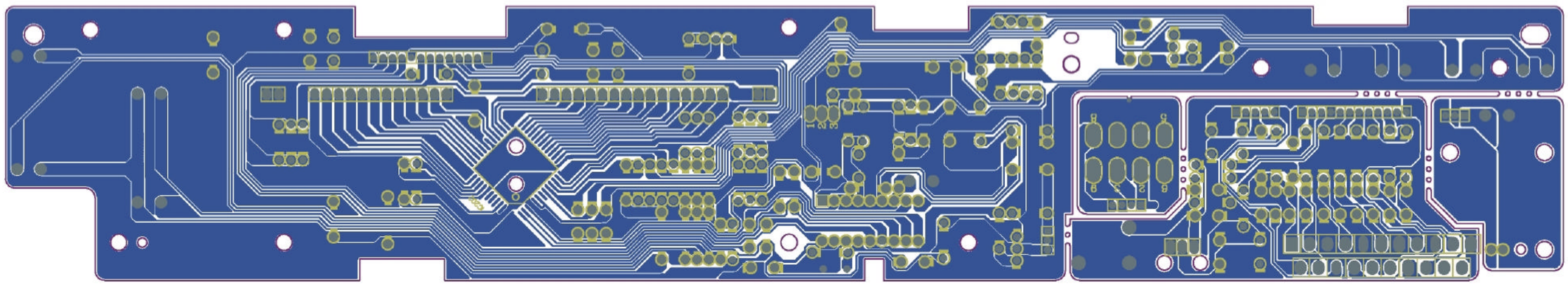
CIRCUIT DIAGRAM - CONTROL BOARD



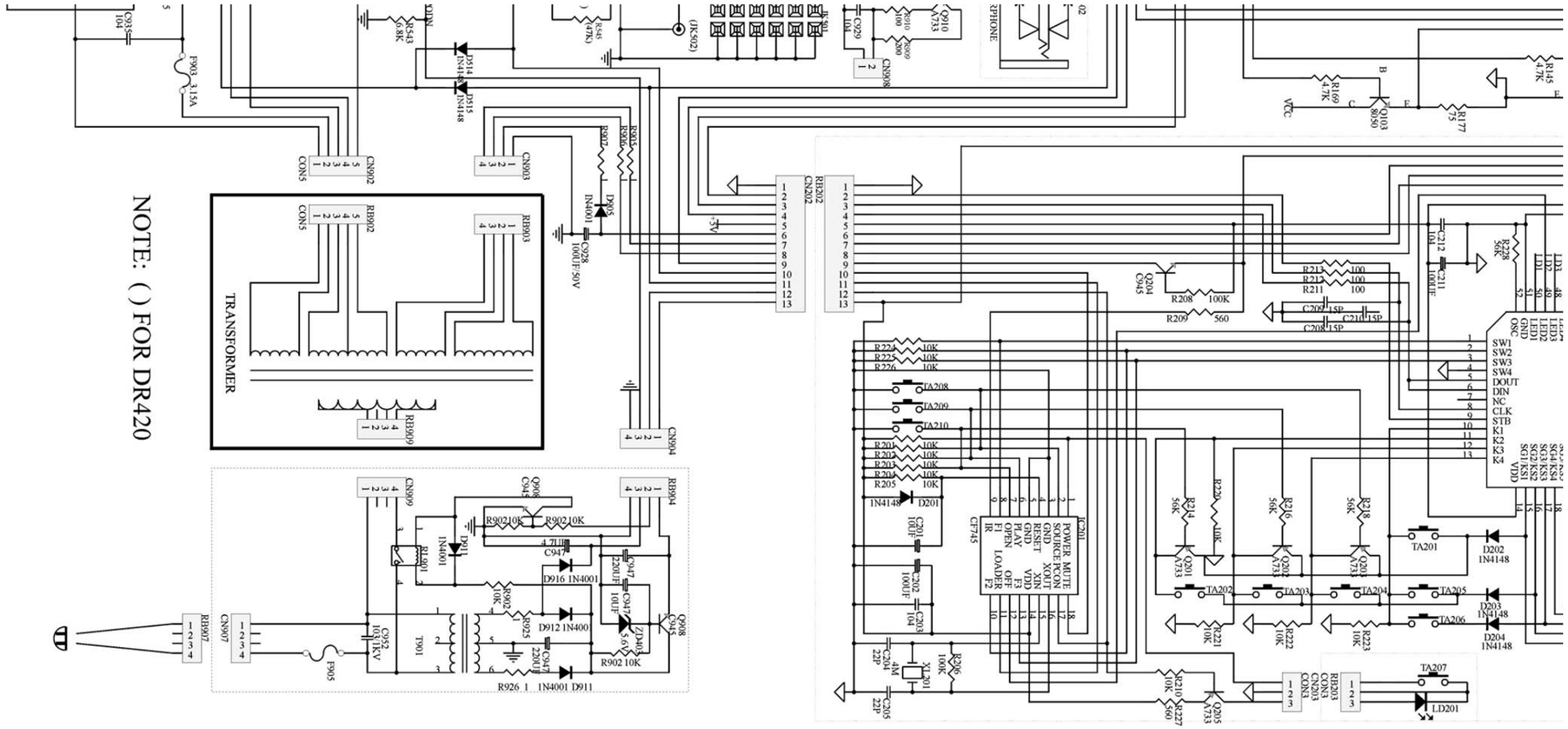
COMPONENT LAYOUT - CONTROL BOARD (TOP VIEW)



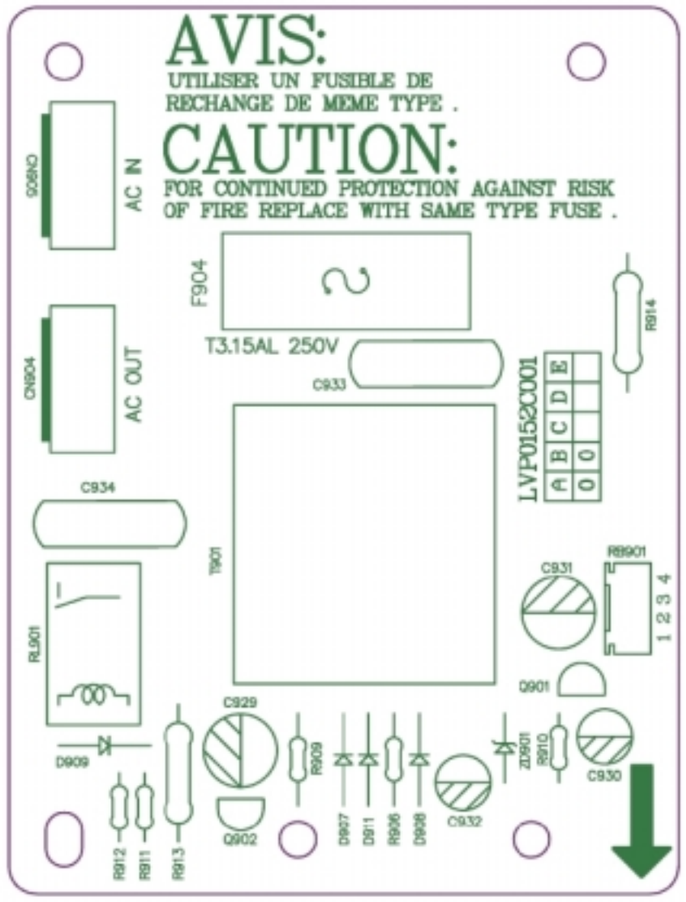
COMPONENT LAYOUT - CONTROL BOARD (BOTTOM VIEW)



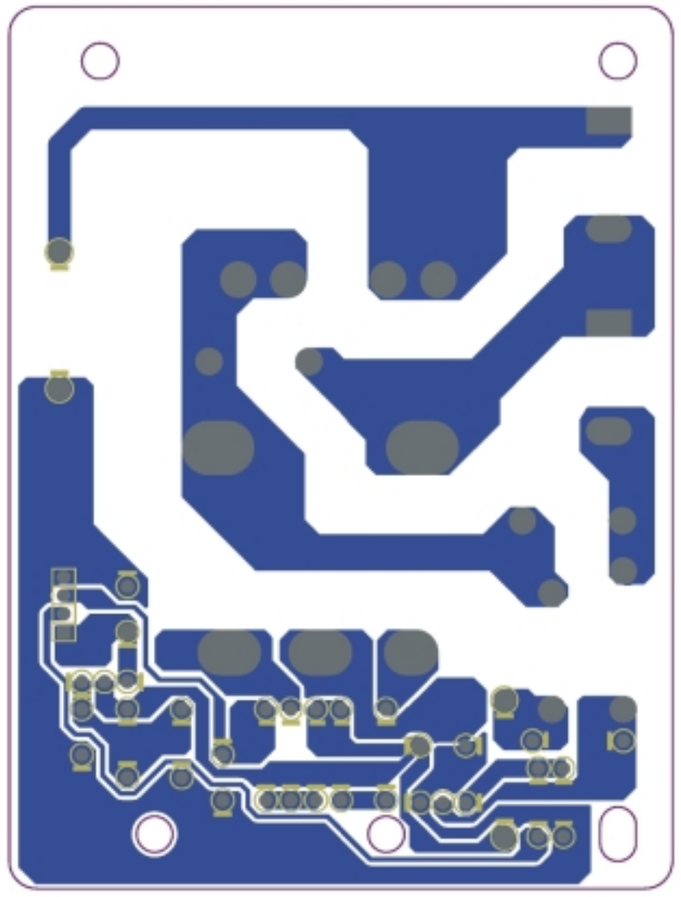
CIRCUIT DIAGRAM - POWER BOARD



COMPONENT LAYOUT - POWER BOARD (TOP VIEW)



(BOTTOM VIEW)



ELECTRICAL PARTS LIST POWER BOARD

MISCELLANEOUS

CN904	CCN396021-0104	CONNECTOR 4 PIN P=3.96mm
CN905	CCN396021-0104	CONNECTOR 4 PIN P=3.96mm
F904	CFC011000-1001	FUSE CLIP DIA5xL20mm FUSE
F904	KSA020315-0030	FUSE 3.15A 250V SLOW
Q901	RAN200945-0001	XISTR NPN 2SC945P
Q902	RAN200945-0001	XISTR NPN 2SC945P
RL901	MRL012004-0011	RELAY GJ-SH-112DM
T901	VFL401245-0800	CON/WIRE 4P 80mm RAINBOW
C934	TTA123011-0010	PWR TRANS 230V 50Hz EI28 AXIAL

CAPACITORS

C929	PME039550-2210	COND ELECT 220 uF 25V 20%
C930	PME039570-1000	COND ELECT 10 uF 50V 20%
C931	PME039550-2210	COND ELECT 220 uF 25V 20%
C932	PME039570-4790	COND ELECT 4.7 uF 50V 20%
C933	PVY2705F0-1031	COND SAFTY 0.01uF 250V 20%

RESISTORS

R910	QAF065000-1020	RESISTOR 1K OHM 1/6W 5% CF
R9111	QAF065000-4720	RESISTOR 4.7K OHM 1/6W 5% CF
R912	QAF065000-2230	RESISTOR 22K 1/6W 5% CF
R913	QAF025000-1000	RESISTOR 10 OHM 1/2W 5% CF

DIODE

D907	RAD114001-0010	DIODE
D908	RAD114001-0010	DIODE
D909	RAD114001-0010	DIODE
D911	RAD114001-0010	DIODE
ZD901	RAZ005006-0020	DIODE ZENR 5.6-5.9V 0.5W

E.LECTRIC PARTS LIST

PART	PDESC	SPECA	SPECB	UM	USQTY	WHUS
JRN002001-0010	RESONATOR	MURATA CSB 455EB		PC	1.00	X1
LHI100094-0001	PCB 94HB	L165.25xW151xT0.8mm	REMOTE PCB DR3.2	PC	1.00	
PVE939530-1010	COND ELECT	uF 10V 20%	5X7MM P=2.0MM	PC	1.00	C1
PYL410370-2210	CHIP CAP	220 pF 50V 5%	0805 TYPE NPO	PC	2.00	C2 C3
QAF065000-1090	RESISTOR	1 OHM 1/6W 5% CF		PC	1.00	R1
RAD114148-0010	DIODE SW;	1N4148		PC	1.00	D2
RAN202001-0001	XISTR NPN	2SC2001L NEC	AI	PC	1.00	Q1
RCI002222-0001	IC 24 PIN	PT2222-001 PTC	64 KEY X'MITTER	PC	1.00	
RHO005208-2001	DIODE IRT	LTE-5208AC		PC	1.00	
PYL410370-1010	CHIP CAP	100 pF 50V 5%	0805 TYPE NPO	PC	8.00	C052 C1104 C403 C401
						C402 C404 C405C406
PYL410370-1020	CHIP CAP	1000 pF 50V 5%	0805 TYPE NPO	PC	10.00	C041 C135 C496 C537 C540
						C541 C542C543 C4115 C074
PYL410370-2200	CHIP CAP	22 pF 50V 5%	0805 TYPE NPO	PC	7.00	C050 C059 C060 C067
						C068 C133 C134
PYL410370-3300	CHIP CAP	33 pF 50V 5%	0805 TYPE NPO	PC	8.00	C001 C1105 C1106 C1107
						C124 C127 C130C200
PYL410370-3310	CHIP CAP	330 pF 50V 5%	0805 TYPE NPO	PC	1.00	C040
PYL410370-4700	CHIP CAP	47 pF 50V 5%	0805 TYPE NPO	PC	12.00	C1017 C1018 C413
						C416 C419 C4211C50C502
						C505 C506 C509 C510
PYL410370-4710	CHIP CAP	470 pF 50V 5%	0805 TYPE NPO	PC	8.00	C147 C148 C149 C150
						C151 C152 C153C154
						C104 C105 C106 C107 C108
						C066 C101 C103 C109 C111
						C116 C118 C119 C120
						C121 C122 C128 C146 C156
						C137 C138 C139 C142 C144
						C157 C158 C159 C1011
						C408 C4110 C4112 C487
						C1020 C1028 C423 C472 C476
						C1014 C131 C507 C927 C162
						C174 C410 C480 C484 C463
						C488 C490 C493 C424 C169
						C495 C1103 C415 C418 C1110
						C503 C504 C508 C511 C115
						C448 C449 C497 C512 C530 C531
						C901 C902 C1005 C125
						C910 C912 C914 C915 C916
						C903 C904 C908 C917 C918
						C919 C921 C923 C925 C460
						C1006 C1008 C129 C194 C1101
						C110 C164 C189 C179 C184
						C013 C102 C1007 C1030 C4114
						C464 C469 C929 ESDC1 C201
PYL456370-1530	CHIP CAP	0.015 uF 50V 5%	0805 TYPE X7R	PC	3.00	C022 C025 C042
PYL456370-2220	CHIP CAP	0.0022 uF 50V 5%	0805 TYPE X7R	PC	2.00	C032 C035
PYL456370-2230	CHIP CAP	0.022 uF 50V 5%	0805 TYPE X7R	PC	12.00	C002 C004 C007 C010 C015 C030
						C033 C046 C049 C051 C058 C070
PYL456370-2720	CHIP CAP	0.0027 uF 50V 5%	0805 TYPE X7R	PC	6.00	C518 C519 C520 C521 C522 C523
PYL456370-2730	CHIP CAP	0.027 uF 50V 5%	0805 TYPE X7R	PC	1.00	C008
QCF015020-0000	CHIP RES.	0 OHM JUMP WIRE	0805 SMT TYPE	PC	4.00	R111 R170 R173 R4113
QCF015020-1000	CHIP RES.	10 OHM 1/10W 5%	0805 SMT TYPE	PC	2.00	R010 R109
QCF015020-1010	CHIP RES.	100 OHM 1/10W 5%	0805 SMT TYPE	PC	13.00	R003 R007 R012 R013 R038
						R4110 R4114 R451 R452
						R453 R454 R455 R456
QCF015020-1020	CHIP RES.	1K OHM 1/10W 5%	0805 SMT TYPE	PC	28.00	R028 R046 R047 R121
						R129 R132 R133 R136
						R137 R140 R141R144 R146 R405
						R124 R125 R128R407
						R4117 R421 R423 R522 R523
						R432 R441 R498 R530 R912
QCF015020-1030	CHIP RES.	10K OHM 1/10W 5%	0805 SMT TYPE	PC	30.00	R015 R016 R024 R027
						R433 R4111 R479 R481
						R483 R485 R487
						R489 R490 R491 R492 R493
						R494 R495 R524 R525
						R534 R424 R536 R537 R538
						R422 R535 R034 R036 R168
QCF015020-1040	CHIP RES.	100K OHM 1/10W 5%	0805 SMT TYPE	PC	17.00	R002 R011 R419 R420 R4112 0
						R515 R4116 R527 R548 R549 R560
						R562 R103 R545 R561 R505 R51

PART	PDESC	SPECA	SPECB	UM	USQTY	WHUS
QCF015020-1530	CHIP RES.	15K OHM 1/10W 5%	0805 SMT TYPE	PC	6.00	R464 R466 R468 R470 R472 R4115
PYL410370-5090	CHIP CAP	5 pF 50V 5%	0805 TYPE NPO	PC	3.00	C003 C005 C048
PYL410370-5610	CHIP CAP	560 pF 50V 5%	0805 TYPE NPO	PC	5.00	C038 C047 C492 C494 C064
PYL439570-1520	CHIP CAP	1500 pF 50V 20%	0805 TYPE Y5V	PC	3.00	C028 C029 C489
PYL439570-3320	CHIP CAP	3300 pF 50V 20%	0805 TYPE Y5V	PC	1.00	C193
PYL439570-4720	CHIP CAP	4700 pF 50V 20%	0805 TYPE Y5V	PC	5.00	C024 C027 C031 C034 C073
PYL439570-4730	CHIP CAP	0.047 uF 50V 20%	0805 TYPE Y5V	PC	3.00	C011 C017 C069
PYL456370-1040	CHIP CAP	0.1 uF 50V 5%	0805 TYPE X7R	PC	111.00	C006 C054 C056 C062
QCF015020-1830	CHIP RES.	18K OHM 1/10W 5%	0805 SMT TYPE	PC	1.00	R499
QCF015020-1840	CHIP RES.	180K OHM 1/10W 5%	0805 SMT TYPE	PC	1.00	R017
QCF015020-2030	CHIP RES.	20K OHM 1/10W 5%	0805 SMT TYPE	PC	2.00	R475 R474
QCF015020-2230	CHIP RES.	22K OHM 1/10W 5%	0805 SMT TYPE	PC	13.00	R477 R014 R054 R058 R457
						R458 R123 R127 R131
						R459 R460 R135 R139
QCF015020-2710	CHIP RES.	270 OHM 1/10W 5%	0805 SMT TYPE	PC	3.00	R114 R415 R416
QCF015020-2740	CHIP RES.	270K OHM 1/10W 5%	0805 SMT TYPE	PC	2.00	R004 R008
QCF015020-3020	CHIP RES.	3K OHM 1/10W 5%	0805 SMT TYPE	PC	3.00	R021 R447 R449
QCF015020-3300	CHIP RES.	33 OHM 1/10W 5%	0805 SMT TYPE	PC	10.00	R106 R107 R164 R165 R166
						R176 R461 R163 R167 R175
QCF015020-3310	CHIP RES.	330 OHM 1/10W 5%	0805 SMT TYPE	PC	5.00	R006 R009 R018 R031 R049
QCF015020-3320	CHIP RES.	3.3K OHM 1/10W 5%	0805 SMT TYPE	PC	4.00	R029 R030 R045 R048
QCF015020-3640	CHIP RES.	360K OHM 1/10W 5%	0805 SMT TYPE	PC	2.00	R427 R428
QCF015020-4700	CHIP RES.	47 OHM 1/10W 5%	0805 SMT TYPE	PC	4.00	R005 R050 R061 R062
QCF015020-4720	CHIP RES.	4.7K OHM 1/10W 5%	0805 SMT TYPE	PC	34.00	R033 R035 R037 R040 R041 R042
						R044 R051 R053 R055 R057 R059
						R101 R043 R113 R122 R169 R064
						R102 R104 R105 R110 R112
						R126 R130 R134 R138 R142 R145
						R431 R440 R526 R448 R063
QCF015020-4730	CHIP RES.	CHIP RES. 47K OHM 1/10W 5%	0805 SMT TYPE	PC	17.00	R032 R052 R056 R406 R408 R425
						R430 R434 R438 R439 R442 R429
						R445 R446 R539 R443 R444
QCF015020-4740	CHIP RES.	CHIP RES. 470K OHM 1/10W 5%	0805 SMT TYPE	PC	2.00	R476 R913
QCF015020-5600	CHIP RES.	CHIP RES. 56 OHM 1/10W 5%	0805 SMT TYPE	PC	1.00	R019
QCF015020-5610	CHIP RES.	CHIP RES. 560 OHM 1/10W 5%	0805 SMT TYPE	PC	6.00	R478 R480 R482 R484 R486 R488
QCF015020-5620	CHIP RES.	CHIP RES. 5.6K OHM 1/10W 5%	0805 SMT TYPE	PC	5.00	R022 R025 R143 R147 R149
QCF015020-5630	CHIP RES.	CHIP RES. 56K OHM 1/10W 5%	0805 SMT TYPE	PC	3.00	R108 R4118 R533
QCF015020-6820	CHIP RES.	6.8K OHM 1/10W 5%	0805 SMT TYPE	PC	8.00	R001 R411 R412 R413
						R414 R417 R418R450
QCF015020-6830	CHIP RES.	68K OHM 1/10W 5%	0805 SMT TYPE	PC	4.00	R426 R435 R436 R437
QCF015020-7500	CHIP RES.	75 OHM 1/10W 5%	0805 SMT TYPE	PC	5.00	R115 R116 R117 R118 R177
QCF015020-8220	CHIP RES.	8.2K OHM 1/10W 5%	0805 SMT TYPE	PC	10.00	R401 R402 R403 R404 R409
						R410 R148 R150 R023 R026
QCP015081-1000	RES ARRAY	10 OHMx4 1/10W 5%	8 PIN CHIP	PC	3.00	RA112 RA113 RA114
QCP015081-3300	RES ARRAY	33 OHMx4 1/10W 5%	8 PIN CHIP	PC	12.00	RA101 RA102 RA103 RA104
						RA105 RA106 RA107 RA109
						RA110 RA111 RA116 RA115
QCP015081-4720	RES ARRAY	4x4.7K 1/10W 5%	8 PIN CHIP	PC	2.00	RA118 RA117
RCI001837-0001	IC 30 PIN	LA1837 SANYO		PC	1.00	IC001
RCI004052-0001	IC 16 PIN	TC4052BFN CHIP	4 CH MULTIPLEXER	PC	1.00	IC401
RCI004053-0001	IC 16 PIN	TC4053BFN TOSHIBA	CHIP	PC	1.00	IC408
RCI004558-0003	IC 8PIN	TEXAS RC4558D SOP8	DR401 DR420 DR610 DR620	PC	10.00	IC110 IC111 IC112 IC402 IC403
						IC409 IC411 IC412 IC413 IC414
RCI006018-0001	IC 208 PIN	ES6018	MICRO CPU	PC	1.00	IC103
RCI008739-0001	IC 20 PIN	WM8739 2CH A/D		PC	1.00	IC115
RCI008746-0001	IC 28 PIN	WM8746 6CH D/A		PC	1.00	IC109
RCI024002-0002	IC 8 PIN	AT24C02N-10SI-2.7 TI	MICRO CHIP	PC	1.00	IC107
RCI052280-0001	IC 8 PIN	PT5228 SOP8 PRONICS	HEADPHONE IC W/MUTE	PC	1.00	IC504
RCI072131-0001	IC 20 PIN	LC72131M SANYO	AM/FM FREQ. IC	PC	1.00	IC002
RCI290080-0002	IC 40 PIN	MX29F080TC-90CE	EEPROM(8M FLASH)	PC	1.00	IC101
RCI400160-0001	IC 54 PIN	4MX16 Y3V TW StarRam	SYNCHRO. DRAM(TSOP)	PC	1.00	IC108
RCI740004-0001	IC 14 PIN	TC74HC04AFN TOSHIBA	CMOS INVERTER IC	PC	1.00	IC104
RCI740374-0002	IC 20 PIN	74HC374		PC	3.00	IC105 IC106 IC119
RCI916433-0001	IC 3 PIN	RT9164-33CLR		PC	1.00	IC113
PYL410370-1510	CHIP CAP	150 pF 50V 5%	0805 TYPE NPO	PC	5.00	C168 C173 C178 C183 C188
PYL456370-1030	CHIP CAP	0.01 uF 50V 5%	0805 TYPE X7R	PC	12.00	C166 C171 C172 C176 C177 C181
						C186 C187 C191 C192 C167 C182
PYL456370-4730	CHIP CAP	0.047 uF 50V 5%	0805 TYPE X7R	PC	10.00	C466 C467 C470 C471 C474
						C479 C482 C483 C475 C478
QCF015020-3330	CHIP RES.	33K OHM 1/10W 5%	0805 SMT TYPE	PC	5.00	R465 R467 R469 R471 R473
RCI072720-0002	IC 24 PIN	LC72720NM		PC	1.00	IC003
SCB008050-6010	CHIP BEAD	600 OHM AT 100MHz	0805 SMD TYPE	PC	6.00	FB103 FB104 FB105
						FB106 FB107 FB001

PART	PDESC	SPECA	SPECB	UM	USQTY	WHUS
RCI062446-0002	IC 42 PIN	SSOP	M6244AFP	PC	1.00	IC410
RCI000809-0003	IC 3 PIN	IMP809 SOT23 RESETVOL 2.93V	MICROCNTL DR620 DR401 D	PC	1.00	IC120
QCF015020-3920	CHIP RES.	3.9K OHM 1/10W 5%	0805 SMT TYPE	PC	1.00	R020
RCD104148-0010	CHIP DIODE	LL4148 TELEFUNKEN	SMT TYPE	PC	2.00	ESDD1 ESDD2
LFF100080-0001	PCB FR-4	MAIN PCB	DR400	PC	1.00	
QCF015020-2220	CHIP RES.	2.2K OHM 1/10W 5%	0805 SMT TYPE	PC	1.00	R065
QAF025000-2290	RESISTOR	2.2 OHM 1/2W 5% CF		PC	6.00	R516 R517 R518 R519 R520 R521
QAF065000-1030	RESISTOR	10K OHM 1/6W 5% CF		PC	2.00	R540 R541
QAF065000-1040	RESISTOR	100K OHM 1/6W 5% CF		PC	2.00	R542 R902
QAF065000-1510	RESISTOR	150 OHM 1/6W 5% CF		PC	4.00	R462 R463 R496 R497
QAF065000-1530	RESISTOR	15K OHM 1/6W 5% CF		PC	6.00	R502 R504 R507 R509 R512 R514
QAF065000-2230	RESISTOR	22K OHM 1/6W 5% CF		PC	1.00	R903
QAF065000-4720	RESISTOR	4.7K OHM 1/6W 5% CF		PC	1.00	R901
QAF065000-4790	RESISTOR	4.7 OHM 1/6W 5% CF		PC	2.00	R528 R529
QAF065000-5610	RESISTOR	560 OHM 1/6W 5% CF		PC	7.00	R501 R503 R506
						R508 R511 R513 R904
QAF065000-6820	RESISTOR	6.8K OHM 1/6W 5% CF		PC	1.00	R543
RAD114001-0010	DIODE;	RECTIFIER 1N4001	1A 35VRMS	PC	3.00	D902 D903 D905
RAD114148-0010	DIODE SW;	1N4148		PC	27.00	D001 D002 D003 D004 D102
						D401 D402D 501 D502D513 D514
						D503 D504 D505 D506 D507
						D508 D509 D510 D511 D512
						D515 D516 D517 D518 D519 D520
RAZ005006-0030	DIODE	6.0-6.3V 0.5W	HITACHI HZ6C-2	PC	6.00	ZD501 ZD401 ZD402
						ZD403 ZD404 ZD109
RAZ005007-0020	DIODE ZENR	6.9-7.2V 0.5W	HITACHI HZ7B-2	PC	8.00	ZD101 ZD103 ZD102 ZD104
						ZD105 ZD106ZD107 ZD108
SAN001600-1000	CHOKE	10 uH 10%	AI INDUCTOR	PC	8.00	L001 L002 L101 L102
						L103 L108 L507L508
SFB001001-0030	BEAD FERIT	DIA3.5x6mm	100 OHM/ AT 100MHZ	PC	2.00	FB101 FB102
SAN001600-2490	INDUCTOR	2.4 uH 10% AI		PC	4.00	L104 L105 L106 L107
QAF045000-5600	RESISTOR	56 OHM 1/4W 5% CF	340X2560934	PC	1.00	R060
QAS045100-1090	RESISTOR	1 OHM 1/4W 5%	FUSIBLE METAL FILM	PC	3.00	R905 R906 R907
RAZ005009-0020	DIODE ZENR	9.1-9.5V 0.5W	HITACHI HZ9C-2	PC	1.00	ZD001
QAF025000-3010	RESISTOR	300 OHM 1/2W 5% CF		PC	1.00	R910
QAF025000-2210	RESISTOR	220 OHM 1/2W 5% CF		PC	1.00	R909
PRE039540-1010	COND ELECT	100uF 16V 20%	85'C	PC	23.00	C009 C012 C016 C053 C057 C061
						C071 C072 C1001 C1102 C407
						C426 C450 C451 C461 C462 C465
						C527 C532 C425 C526 C065 C409
PRE039540-2200	COND ELECT	22uF 16V 20%	85'C	PC	1.00	C043
PRE039540-2210	COND ELECT	220 uF 16V 20%	85'C	PC	7.00	C528 C529 C911 C913
						C922 C924 C926
PRE039540-3300	COND ELECT	33uF 16V 20%	85'C	PC	2.00	C045 C044
PRE039570-1000	COND ELECT	10 uF 50V 20%	85'C P=5MM	PC	57.00	C143 C412 C420 C036 C037
						C1000 C1009 C1010 C1012 C1015
						C1019 C1023 C422 C1027 C477
						C126 C132 C136 C140 C141 C145
						C1016 C155 C039 C063 C411 C538
						C160 C161 C165 C170 C175 C180
						C190 C195 C197 C198 C199
						C1109 C458 C459 C468 C473
						C485 C486 C491 C498 C524 C481
						C1029 C114 C123 C525 C533
PRE039570-1010	COND ELECT	100uF 50V 20%	85'C	PC	1.00	C928
PRE039570-1090	COND ELECT	1uF 50V 20%	85'C P=5MM	PC	3.00	C018C C019 C021
PRE039570-3390	COND ELECT	3.3 uF 50V 20%	85'C	PC	2.00	C055 C163
PRE039570-4780	COND ELECT	0.47 uF 50V 20%	85'C	PC	1.00	C020
PRE039570-4790	COND ELECT	uF 50V 20%	85'C	PC	4.00	C023 C026 C535 C499
PRM0373A0-1030	COND MYLAR	0.01 uF 100V 5%	AI	PC	3.00	C933 C934 C935
PRM0373A0-1040	COND MYLAR	R 0.1 uF 100V 5%	AI	PC	6.00	C513 C514 C515 C516 C517 C536
PRM0373A0-1530	COND MYLAR	0.015 uF 100V 5%	AI	PC	2.00	C453 C456
PRM0373A0-8220	COND MYLAR	0.0082 uF 100V 5%	AI	PC	2.00	C452 C455
RAM200192-1001	FET	2SK192A-Y/GR	TOSHIBA	PC	1.00	Q003
RAN200945-0001	XISTR NPN	2SC945P	NEC	PC	15.00	Q005 Q006 Q007 Q008 Q010
						Q404 Q405 Q502 Q503 Q103
						Q909 Q505 Q506 Q908 Q102
RAN201675-0001	XISTR NPN	2SC1675L NEC	AI	PC	2.00	Q001 Q002
RAN202001-0001	XISTR NPN	2SC2001L NEC	AI	PC	1.00	Q101
RAN202878-0001	XISTR NPN	2SC2878-A (TE2,.M)		PC	2.00	Q401 Q402
RAP200733-0001	XISTR PNP	2SA733Q,P NEC	HFE=135-400	PC	6.00	Q004 Q009 Q011 Q403 Q504 Q910
PRE039550-1010	COND ELECT	100uF 25V 20%	85'C P=5MM	PC	3.00	C534 C907 C909
CCN200000-0104	CONNECTOR	4 PIN PITCH=2.0mm	B4B-PH-K TOP BASE	PC	2.00	CN501 CN901

PART	PDESC	SPECA	SPECB	UM	USQTY	WHUS
CCN200000-0105	CONNECTOR	5 PIN PITCH=2.0mm	B5B-PH-K TOP BASE	PC	1.00	CN107
CCN200000-0112	CONNECTOR	12 PIN PITCH=2.0mm	B12B-PH-K TOP BASE	PC	1.00	CN108
CCN200000-0113	CONNECTOR	13 PIN PITCH=2.0mm	B13B-PH-K TOP BASE	PC	1.00	CN201
CCN250000-0102	CONNECTOR	B2B-XH-A 2 PIN	POST BASE TOP P=2.5	PC	1.00	CN908
CCN250000-0104	CONNECTOR	B4B-XH-A 4 PIN	POST BASE TOP P=2.5	PC	1.00	CN903
CCN250000-0105	CONNECTOR	B5B-XH-A 5 PIN	POST BASE TOP P=2.5	PC	1.00	RB906
CCN250000-0502	CONNECTOR	S2B-XH-A 2 PIN	POST BASE SIDE P=2.5	PC	1.00	CN001
CCN254020-0440	CONNECTOR	20x2 PIN PLUG BASE	2.54MM DOUBLE PIN	PC	1.00	CN103
CCN396020-0105	CONNECTOR	5 PIN CL3962WVO	POST BASE TOP P=3.96	PC	1.00	CN902
CJA003001-1020	ANT JACK	FM ANT JACK 1301020	(F) TYPE SX-521-00	PC	1.00	JK001
CJR006401-0010	RCA JACK	6P REDx3/WHTx3 STAND	RCA-614	PC	1.00	JK401
JFT005002-0040	CER FILTER	10.7 MHZ	MURATA SFE-10.7MS3	PC	2.00	CF002 CF001
PVE039550-4720	COND ELECT	4700 uF 25V 20% 85`C	16X32MM CUT 3.5MM	PC	1.00	C920
PVE039550-6820	COND ELECT	6800 uF 25V 20% 85`C	CUT 3.5MM	PC	2.00	C905 C906
RHD208010-0010	BRIDGE KBU8B	8A 100V UL	SEP	PC	2.00	D901 D904
RHI007265-0001	IC 11 PIN	TDA7265 SGS THOMSON	25+25 POWER IC	PC	1.00	IC503
RHI007269-0001	IC 11 PIN	TDA7269A (ST) 14Wx2	STEREO AMPLIFIER	PC	2.00	IC501 IC502
RHI007805-0001	IC 3 PIN	MC7805ACT 5V 2% 1A	(5V2) VOL.REGULATOR	PC	2.00	IC904 IC903
RHI007812-0001	IC 3 PIN	7812 12V 1A	REGULATOR	PC	1.00	IC901
RHI007912-0001	IC	3 PIN 7912	REGULATOR	PC	1.00	IC902
RHP000420-0001	XISTR PNP	TIP42C		PC	1.00	Q907
RHV100149-0001	DIODE TUNG	AM TOSHIBA 1SV149B		PC	2.00	VD001 VD002
SIL106003-3930	COIL	39 mH 10% D6xH11xP5mm		PC	1.00	L003
SIF010001-0040	AM IFT	455KHz Q=130	1-2=72/2-3=80/4-6=10	PC	1.00	T002
SIF020001-0050	FM IFT	10.7MHz Q=60 MIN	SUMIDA P=7SB(SP-142-019)1	PC	1.00	T007
SIL013009-0011	ANT OSC	AM 4-6:10T 1-3:86T	COILS:R2523-0A10	PC	1.00	T001
SIL013010-0012	OSC COIL	108uH (796 KHz) COIL	R2523-0H07-502522	PC	1.00	T003
SIL013012-0010	OSC FM	SUMIDA S-8N		PC	1.00	T008
SIL016001-0010	BIAS COIL	78 KHz	COIL:OOD8-865807	PC	1.00	T004
SIL016001-0020	BIAS COIL	16 KHz	COIL:OOD8-865806	PC	2.00	T006 T005
JFT005001-0030	CER FILTER	450 KHZ	TOKO:AHCFM2-450BL	PC	1.00	CF003
JQC023101-2760	CRYSTAL	27 MHZ HC-49US 30ppm	SD(JINGKE)	PC	1.00	XL101
JQC013101-4351	CRYSTAL	4.332 MHZ HC-49/U	30PPM SD(JINGKE)	PC	1.00	XL002
MVC001001-0010	COND TRIM	3 - 10 PF NP0		PC	1.00	CT001
MVC001002-0010	COND TRIM	4.2 - 20 PF N450		PC	1.00	CT002
CJS012102-0010	SPK JACK	RDx2-BU-GYx2-GN/BKx6	12P W/SPING DR400	PC	1.00	JK501
CFC011000-1001	FUSE CLIP	DIA5xL20mm FUSE		PC	6.00	
PRN0263A0-4740	COND METAL	0.47uF 100V 5%	CAMEL:MPE AI-RADIAL	PC	2.00	C454 C457
CJC010001-3010	RCA+DIN JK	4P DIN+2RCA W/GND	AV-SW-01	PC	1.00	JK101
SIL002011-2001	CHOKE COIL	20uH 2A PIN:10mm+/-0.01		PC	6.00	L501 L502 L503 L504 L505 L506
JQC013101-4550	CRYSTAL	4.5000 MHZ HC-49/U	30PPM SD(JINGKE)	PC	1.00	XL001
KSA020315-0030	FUSE 3.15A	3.15A 250V SLOW	5X20MM RUL/VDE	PC	1.00	F903
KSA020630-0110	FUSE	6.3A 250V SLOW	5X20MM RUL/VDE	PC	2.00	F901 F902
PLD249670-1040	COND DISC	0.1 uF 50V +80-20%	II Z5V LONG LEAD	PC	1.00	
QAF025000-1000	RESISTOR	10 OHM 1/2W 5% CF		PC	1.00	R913
QAF065000-1020	RESISTOR	1K OHM 1/6W 5% CF		PC	1.00	R910
QAF065000-2230	RESISTOR	22K OHM 1/6W 5% CF		PC	1.00	R912
QAF065000-4720	RESISTOR	4.7K OHM 1/6W 5% CF		PC	1.00	R9111
RAD114001-0010	DIODE;RECTIFIE	1N4001	1A 35VRMS	PC	4.00	D907 D908 D909 D911
RAZ005006-0020	DIODE ZENR	5.6-5.9V 0.5W	HITACHI HZ6B-2	PC	1.00	ZD901
LVP100152-0001	PCB 94V0	POWER PCB	DR400	PC	1.00	
QAS045100-1090	RESISTOR	1 OHM 1/4W 5%	FUSIBLE METAL FILM	PC	2.00	R906 R909
PRE039550-2210	COND ELECT	220uF 25V 20%	85'C	PC	2.00	C929 C931
PRE039570-1000	COND ELECT	10 uF 50V 20%	85'C P=5MM	PC	1.00	C930
PRE039570-4790	COND ELECT 4.7	uF 50V 20%	85'C	PC	1.00	C932
RAN200945-0001	XISTR NPN	2SC945P	NEC	PC	2.00	Q901 Q902
CCN396021-0104	CONNECTOR	4 PIN P=3.96mm	REMOVE PIN2&3 H TYPE	PC	2.00	CN904 CN905
MRL012004-0011	RELAY	GJ-SH-112DM	320 OHM	PC	1.00	RL901
PVY2705F0-1031	COND SAFTY	0.01uF 250V 20%	YITAI Y2 CUT 3.5MM	PC	2.00	C933 C934
TTA123011-0010	PWR TRANS	230V 50Hz EI28 AXIAL	O/P:12V/100MA	PC	1.00	T901
VFL401245-0800	CON/WIRE	4P 80mm RAINBOW	A=2MM B=2012V	PC	1.00	
CFC011000-1001	FUSE CLIP	DIA5xL20mm FUSE		PC	2.00	F904
KSA020315-0030	FUSE	3.15A 250V SLOW	5X20MM RUL/VDE	PC	1.00	F904
QAF065000-1010	RESISTOR	100 OHM 1/6W 5% CF		PC	4.00	R207 R211 R212 R213
QAF065000-1020	RESISTOR	1K OHM 1/6W 5% CF		PC	3.00	R229 R230 ZD202
QAF065000-1030	RESISTOR	10K OHM 1/6W 5% CF		PC	14.00	R201 R202 R203 R204
						R205 R210 R221 R226 R206
						R222 R223 R220 R224 R225
QAF065000-1040	RESISTOR	100K OHM 1/6W 5% CF		PC	1.00	R208
QAF065000-2230	RESISTOR	22K OHM 1/6W 5% CF		PC	1.00	R231
QAF065000-5610	RESISTOR	560 OHM 1/6W 5% CF		PC	2.00	R209 R227
QAF065000-5630	RESISTOR	56K OHM 1/6W 5% CF		PC	4.00	R214 R216 R218 R228
RAD114148-0010	DIODE SW;	1N4148		PC	4.00	D201 D202 D203 D204

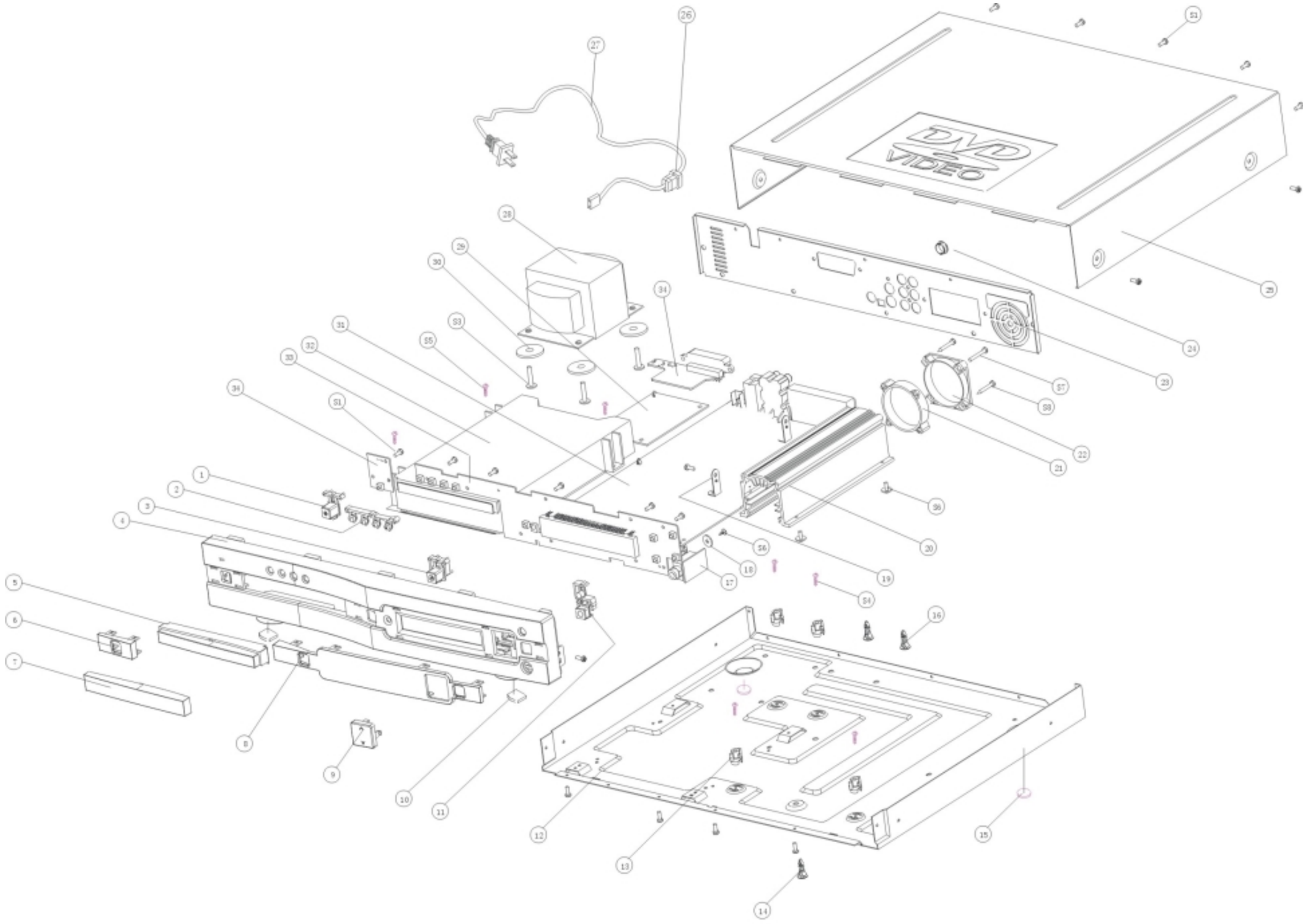
PART	PDESC	SPECA	SPECB	UM	USQTY	WHUS
RAZ005006-0020	DIODE ZENR	5.6-5.9V 0.5W	HITACHI HZ6B-2	PC	1.00	ZD201
LVC100154-0001	PCB 94V0	CNTL PCB	DR400	PC	1.00	
MAW060001-0010	AI TACT SW	SKHVBE3520	5.0 MM 160 GF	PC	9.00	TA201 TA202 TA203 TA204
						TA208 TA209 TA210TA205 TA206
PRE939560-1010	COND ELECT	100uF 35V 20%	85'C SMALL TYPE	PC	1.00	C213
PRD113370-1500	COND DISC	15 pF 50V 5%	NP0	PC	4.00	C208 C209 C210 C216
PRD113370-2200	COND DISC	22 pF 50V 5%	NP0 D=5.	PC	1.00	C205
PRD235470-2210	COND DISC	220 pF 50V 10%	Y5P II D=5	PC	1.00	C226
PRD249670-1040	COND DISC	0.1 uF 50V +80-20%	Z5V II	PC	3.00	C203 C207 C212
PRE039540-1010	COND ELECT	100uF 16V 20%	85'C	PC	3.00	C202 C206 C211
PRE039570-1000	COND ELECT	10 uF 50V 20%	85'C P=5MM	PC	1.00	C201
RAN200945-0001	XISTR NPN	2SC945P	NEC	PC	1.00	Q204
RAP200733-0001	XISTR PNP	2SA733Q,P NEC	HFE=135-400	PC	4.00	Q201 Q202 Q203 Q205
PRD235470-1030	COND DISC	0.01 uF 50V 10%	Y5P,II	PC	1.00	C234
PRD113370-3300	COND DISC	33 pF 50V 5%	NP0	PC	2.00	C231 C232
PRD113370-3000	COND DISC	30 pF 50V 5%	NP0 T.C.	PC	1.00	C204
JQC023101-4550	CRYSTAL	4.5000 MHZ HC-49/S	30PPM SD(JINGKE)	PC	1.00	XL201
RHI008056-0001	IC 18 PIN	CTM8B56EN(MCU1226)		PC	1.00	IC201
RHO200038-0001	IRT SENSOR	RIM B38F (TONGTI)	130MIN	PC	1.00	SN201
VFL3112BB-2000	FLAT WIRE	3P 200mm BLK P=2	A,B=STRIP 4	PC	1.00	
VFLD01245-1200	CON/WIRE	CON/WIRE 13P 120mm RAINBO	A=2MM B=2012V	PC	1.00	
CSL208442-0900	SOLDER LUG	OD8.4xID4.2xT0.3 mm	W/26GA 80MM BLK WIRE	PC	1.00	
KLV000016-0020	VFD	VA84x9PA118.2x20.5mm	DR620 EMERSON	PC	1.00	DP201
RCI006311-0001	IC 52 PIN	PT6311(PTC)		PC	1.00	IC202
SFB001001-0030	BEAD FERIT	DIA3.5x6mm	100 OHM/ AT 100MHZ	PC	8.00	FB201 FB202 FB203 FB204
						FB205 FB206 FB207 FB208
LVC100154-0021	PCB 94V0	SCART PCB	DR401	PC	0.00	
PRD113370-1500	COND DISC	15 pF 50V 5%	NP0	PC	9.00	C217 C218 C219 C220 C221
						C222 C223 C224 C225
PRE039570-1000	COND ELECT	10 uF 50V 20%	85'C P=5MM	PC	2.00	C214 C215
CSS021001-1030	SCART SOCK	21PIN PITCH=3.81mm	RC-2106 CGIC	PC	1.00	JK201
VFL501245-2200	CON/WIRE	5P 220mm RAINBOW	A=2MM B=2012V	PC	1.00	
VFLC01245-2800	CON/WIRE	12P 280mm RAINBOW	A=2MM B=2012V	PC	1.00	
PLD235470-1020	COND DISC	0.001 uF 50V 10% Y5P	LEAD LONG	PC	1.00	
CSL207035-0200	SOLDER LUG	OD7.0xID3.5xT0.3 mm	W/26GA 60MM BLK WIRE	PC	1.00	
PLD235470-1020	COND DISC	0.001 uF 50V 10% Y5P	LEAD LONG	PC	1.00	
CSL207035-0200	SOLDER LUG	OD7.0xID3.5xT0.3 mm	W/26GA 60MM BLK WIRE	PC	1.00	
MAW060001-0010	AI TACT	SW SKHVBE3520	5.0 MM 160 GF	PC	1.00	TA207
LVC100154-0031	PCB 94V0	LED PCB	DR401	PC	0.00	
KED200052-0010	LED	2x5 mm RED BRIGHT	LEAD 26 MM	PC	1.00	LD201
CJM064001-1010	PHONE JACK	D6.4 9 PIN NICKEL	JY-6315-01-090	PC	1.00	JK502
VFL401245-1000	CON/WIRE	4P 100mm RAINBOW	A=2MM B=2012V	PC	1.00	
LVC100154-0041	PCB 94V0	PHONE PCB	DR401	PC	0.00	
PLD249670-1040	COND DISC	0.1 uF 50V +80-20%	II Z5V LONG LEAD	PC	1.00	
CSL207035-0200	SOLDER LUG	OD7.0xID3.5xT0.3 mm	W/26GA 60MM BLK WIRE	PC	1.00	
CSL208442-0900	SOLDER LUG	OD8.4xID4.2xT0.3 mm	W/26GA 80MM BLK WIRE	PC	1.00	
TTI023001-0080	X'FORMER	EI-76 230V 15Wx5	DR401	PC	1.00	
VPE003252-0010	LINE CORD	2P 1980mm BLK VDE W/3.96VH 4P		PC	1.00	
WVD100002-0006	DVD LOADER	DSL-710A DVS ATRAPI	HITACHI PICKUP	PC	1.00	
SFB001001-0200	BEAD FERIT	DIA25x15x10 mm	W/O COAT	PC	2.00	
VWA330032-0001	CON/WIRE	5P 220mm 2468#24 RIB	A=JP1120-4 B=2.5/5PMM	PC	1.00	
VWA410002-0001	ATAPI CABL	40P 220mm 2551#28	A,B=IDC CON.FFC CAB	PC	1.00	
VSC000002-0010	SCART CABL	SC/G-SC/G,1000mm	BLK	PC	1.00	
VRC303001-0010	RCA CABLE	1800mm BLK OD2.6x7.8	A,B=RD/WHT/YEL RCA P	PC	1.00	
VTA400001-0030	FM ANTENNA	1500 mm 75 OHM MALE	JACK W/O PLASTIC WHT	PC	1.00	
VTA400002-0010	LOOP ANT	W/2P 2.5mm		PC	1.00	

MECHANICAL PARTS LIST

PARTS	PDESC	SPECA	SPECB	UM	USQTY	WHUS
BPI100006-0AY0	BATT CASE	IRT BATTERY CASE	SILVER DR3.1	PC	1	
DSP000072-0001	BATT SPRIN	D0.5xOD2-8.2xL2.5mm	4-TUNRS DR3.1	PC	1	
DSP000072-0002	BATT SPRIN	D0.5xOD3-8.2xL7.5mm	5-TUNRS DR3.1	PC	1	
DSP000072-0003	BATT SPRIN	D0.5mm	4/5-TUNRS DR3.1	PC	1	
HSP140021-3060	SCREW	T2.0xL6xP0.63mm	BLACK OXIDE	PC	1	
IVE100144-0001	SPONGE	L148xW48xT0.5mm	DR3.1/3.2/3.5/3.8	PC	1	
IVA000001-0003	POLY BAG	L220xW80mm	W/RECYCLE	PC	1	
BNI101049-0005	INLAY:	49KEY ROADSTAR	DR401	PC	1	
BRK101054-0014	KEY PAD	54KEY GRAY	DR401	PC	1	
BPI100004-0AYM	TOP CASE	DR401 ROADSTAR		PC	1	
YLB124003-0001	REMOTE LABEL	DR401 ROADSTAR	SCHNEIDER USED	PC	1	
BPI100005-0AY0	BOTTOM CAS	IRT BOTTOM CASE	SILVER DR3.1	PC	1	
GAL100093-0001	HEAT SINK	AL	DR400	PC	1	
HSP140054-1080	SCREW	T3.0xL8xP1.06mm	NICKLE	PC	9	
HST143084-1060	SCREW	M3.0xP0.5x6	NICKLE	PC	2	
HIM000001-0008	MICA SHEET;	L20xW25xT0.1mm	W/1 HOLE 3.0D	PC	3	IC501 IC502 IC503
HIM000001-0001	MICA SHEET;	L13xW18xT0.1mm	W/1 HOLE D3.6 TO-220	PC	1	IC902
GSE100211-0001	BRACKET	T=0.8mm	DR401	PC	2	
HSF140054-3280	SCREW	T3xP1.06xL28mm	BLACK DR402	PC	2	
HSF140051-3200	SCREW	T3xP1.06xL20mm	BLACK DR402	PC	2	
DHU201001-0001	WASHER	OD6xID3xH2.5mm 602S-V0	PINGOOD 602S-V0	PC	4	IC501 IC502 IC503 IC902
BPH100065-0001	BKT	FAN BKT	DR400	PC	1	
FAN021203-0004	DC FAN	70mA KD1205HPV3	50X50XT10MM DIS:80MM	PC	1	
DCR030001-0001	FUSE COVER;	ID19.6xW11xH5.5mm UL	PVC TRANSPARENT	PC	1	
IVE100208-0001	SPONGE	L13*W7*T7mm	2 SIDE W/AD HESIVE	PC	1	
IVE100209-0001	SPONGE	L15*W10*T4mm	2 SIDE W/AD HESIVE	PC	1	
IVE100222-0001	SPONGE	L10xW7xT11mm	DR401	PC	1	
DTB003000-0130	TUBING SRK	DIA=3 L=13 mm BLACK	50% SHRINKAGE UL	PC	1	
BPH000064-0001	BUSHING	D13XD10X4.7		PC	1	
BPH000067-0001	PLASTICBKT	PLASTIC BRACKET	H=8.5MM HIPS.	PC	2	
BPH100023-0001	PCB BKT	ABS	DR3.1	PC	2	
BPN100078-0001	DISP.	LENS AS DISPLAY WIN. LENS	DR400	PC	1	
BRB000049-0002	RUBBER	DIA14xT2mm WHITE		PC	2	
BRB100013-0001	RUBBER	11x15.6xT3.0mm	DR3.2	PC	2	
DBU001005-0010	BUSHING	AC LINE BUSHING	PIN GOOD 5RF-5A	PC	1	
DSS100022-0001	SPACER	A=10 B=1.2-1.6mm	PINGOOD SCB-10	PC	2	
DSS100022-0002	SPACER	A=12.7 B=1.2-1.6mm	PINGOOD SCB-12	PC	2	
DWT000001-0900	WIRE TIE	GT-90M 90mm		PC	3	
GSE100170-0001	TOP COVER	SECC T=0.8mm	DR400	PC	1	
GSE100171-0101	BOTTOM CAB	SECC=0.8mm ADD VENTILATE	HOLES DR420	PC	1	
HSD143103-1080	SCREW	M4.0XP0.7x8mm	NIKCLE	PC	4	
HSP140054-1080	SCREW	T3.0xL8xP1.06mm	NICKLE	PC	22	
HST143084-1060	SCREW	M3.0xP0.5x6	NICKLE	PC	23	
HST143084-1080	SCREW	M3.0xP0.5x8	NICKLE	PC	4	
HST143084-1160	SCREW	M3.0xL16xP0.5	NICKEL	PC	4	
HSW140054-1080	SCREW	T3.0xL8xP1.06mm	NICKLE WASHER HEAD	PC	5	
HWS11E032-4100	WASHER	OD14xID3.2xT1.0mm		PC	1	
BPD101037-0AY0	DVD DOOR	ABS	DR401	PC	1	
BPK106026-0AY0	POWER KNOB	ABS 877C SILVER	DR410	PC	1	
HWF118040-6050	WASHER FIB	OD8.0xID4.0xT0.5 mm		PC	6	
HWS11G045-1100	WASHER	OD16 ID4.5 T1.0	ZINC CHROMATE	PC	4	
GSE100216-0001	BRACKET	T=1.0mm	FOR FRONT CAB	PC	1	
GSE100217-0001	BRACKET	T=1.0mm	FOR BOTTOM CAB.	PC	1	
IVE100238-0001	SPONGE	L82xW10xT4 FIREPROOF	DR401 QUELLE	PC	2	
BPK102057-0AY0	FUN.KNOB	ABS	DR400	PC	1	
BPK105038-0AY0	VOL.KNOB	KNOB ABS	DR400	PC	1	
BPK108054-0AY0	SELECT KNB	ABS	DR400	PC	1	
BPK108055-0AY0	OPEN KNOB	ABS	DR400	PC	1	
IVA000001-0003	POLY BAG	L220xW80mm	W/RECYCLE	PC	1	
BPD101038-0001	DOOR COVER	ABS DVD DOOR COVER	DR400	PC	1	
BPD101010-0001	TRIM PART	AS DR401		PC	1	
BPF104013-0AY2	FRONT CAB	DR401 ROADSTAR		PC	1	
GSE100169-0003	BACK CAB	SECC T=0.8mm W/SCART 6 CHANNEL	DR401 ROADSTAR	PC	1	
BNP100074-0001	PVC PLATE	L13.5xW8xT1mm	MX3600	PC	1	
IVE100180-0001	SPONGE	SHORT		PC	1	
YLB002000-0007	LASER LABEL	LASER LABEL	SCHNEIDER USED	PC	1	
DTB008000-0200	TUBING SRK	DIA=8 L=20 mm BLACK	50% SHRINKAGE VINYL	PC	1	
ITF100183-0001	END CAP	RIGHT	DR401	PC	1	
ITF100182-0001	END CAP	LEFT	DR401	PC	1	
IVA000001-0048	POLY BAG	L240xW355mm	W/RECYCLE MARK&HOLE	PC	1	
IVA000001-0059	POLY BAG	L380xW250mm	W/RECYCLE MARK, HOLE	PC	1	

PARTS	PDESC	SPECA	SPECB	UM	USQTY	WHUS
IVA000001-0061	POLY BAG	L610xW540mm	W/RECYCLE	PC	1	
ESD10A001-0304	SPK BOX	AY ROADSTAR DR401		SET	1	
IVA007006-0010	SOFT BAG	L420xW160xT0.5mm	W/RECYCLE RED	PC	2	
ICC100019-0038	CARTON	L524xW464xH436mm DR401 ROADSTAR		PC	1	
YOM100143-0002	OWN MANUAL	ROADSTAR DR401	DR403 SUBWOOFER CLATRO	PC	1	
YLB107000-0157	BAR CODE	LABEL DR401 ROADSTAR		PC	1	
YCD100048-0001	WARTY CARD	DR401 ROADSTAR		PC	1	
YLB105000-0019	SERIAL LAB	AV0DR32		PC	1	
IVH002001-0016	SOFT SHEET	L440xW245xT0.5mm	SR30/S20	PC	1	
IVA000001-0003	POLY BAG	L220xW80mm	W/RECYCLE	PC	1	

EXPOLDED VIEW OF MECHANISM



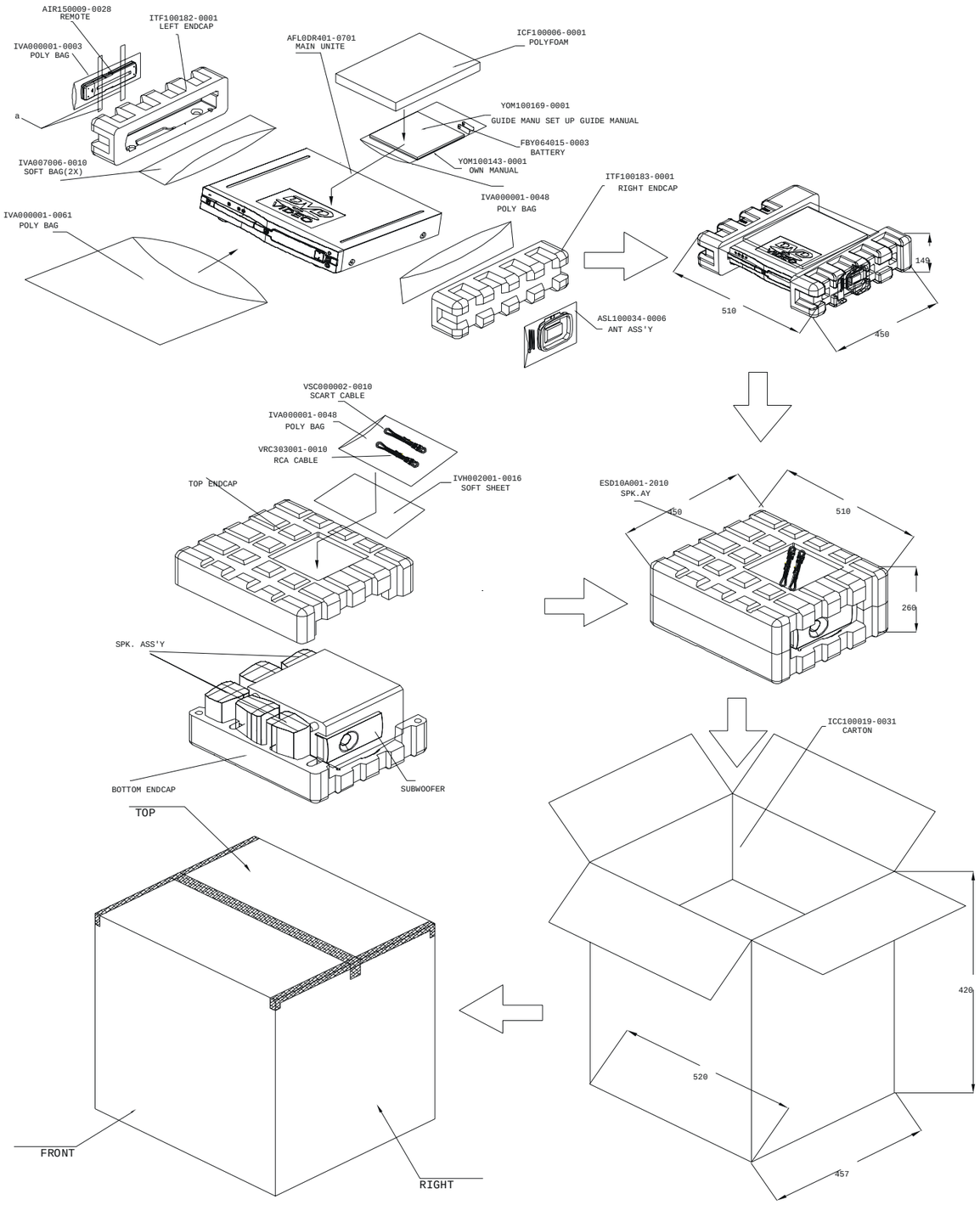
MECHANICAL&ACCESSORY PARTS LIST-MAIN UNIT

1	BPK106026-0AY0	POWER KNOB	ABS SPRAYING OIL	1
2	BPK102057-0AY0	FUNCTION KNOB	ABS SPRAYING OIL	1
3	BPK108055-0AY0	OPEN KNOB	ABS SPRAYING OIL	1
4	BPF104013-0AY1	FRONT CAB	HIPS SPRAYING OIL/PRINTING	1
5	BPD101037-0AY	DVD DOOR	AS/PRINTING	1
6	BPD101010-0001	TRIM PART	ABS SPRAYING OIL	1
7	BPD101038-0001	DOOR COVER	AS/PRINGTING	1
8	BPN100078-0001	DISPLAYS LENS	AS/PRINTING	1
9	BPK105038-0AY0	VOL.KNOB	ABS SPRAYING OIL	1
10	BRB100013-0001	RUBBER		1
11	BPK108054-0AY0	SELECT KNOB	ABS SPRAYING OIL	2
12	GSE100171-0001	BOTTOM	SECC T=0.8mm	1
13	BPH100023-0001	PCB BKT(H=8.5)		4
14	DSS100022-0001	SPACER(SCB-10)		2
15	BRB000049-0002	RUBBER FOOT		1
16	DSS100022-0002	SPACER(SCB-12)		2
17	APE100154-0041	PHONE PCB ASSY	OD14xID3.2xT1.0	1
18	HWS11E032-4100	WASHER	OD14xID3.2xT1.0	
19	GSE100211-0001	BRACKET		1
20	GAL100093-0001	HEAT SINK		1
21	BPH100065-0001	FAN BKT	HIPS	1
22	FAN021203-0004	FAN		1
23	GSE100169-0001	BACK CAB.	SECC T=0.8mm	
24	BPH000064-0001	BUSHING		1
25	GSE100170-0001	TOP COVER	SECC T=0.6mm	
26	DBU001005-0010	BUSHING		1
27	VPE003252-0010	LINE CORD		1
28	TTI023001-0080	TRANSFORMER		1
29	APE100152-0001	POWER PCB ASSY		1
30	HWS11G045-1100	WASHER		1
31	APE100080-0001	MAIN PCB ASSY		1
32	WVD100002-0004	LOADER		1
33	APE100154-0011	KEY PCB ASSY		1
34	APE100154-0031	LED PCB ASSY		1
35	APE100154-0021	SCART PCB ASSY		1

SCREW LIST-MAIN UNIT

S1	HSP140054-1080	SCREW	T3.0xL8.0xP1.06	22
S2	HST143084-1060	SCREW	M3.0x6x0.5P	23
S3	HSD143103-1080	SCREW	M4.0x8	4
S4	HST143084-1160	SCREW	M3.0x16x0.5P	4
S5	HST143084-1080	SCREW	M3.0x8.0x0.5P	4
S6	HSW140054-1080	SCREW	T3.0xL8.0xP1.06	5
S7	HSF140054-3280	SCREW	T3.0xP1.06xL28	2
S8	HSF140051-3200	SCREW	T3.0xP1.06xL20	2

PACKAGE EXPOLDED VIEW OF MECHANISM



MECHANICAL&ACCESSORY PARTS LIST-MAIN UNIT

1	AFL0DR401-6501	MAIN UNIT	1
2	AIR150009-0002	REMOTE	1
3	ASL100034-0006	ANT ASS'Y	1
4	ESD10A001-0304	SPK.AY	1
5	FBY064015-0003	BATTERY	1
6	ICC100019-0038	CARTON	1
7	ICF100006-0001	POLY FOAM	1
8	ITF000183-0001	RIGHT ENDCAP	1
9	ITF100182-0001	KEFT EBD CAP	1
10	IVA000001-0003	POLY BAG	1
11	IVA000001-0048	POLY BAG	2
12	IVA000001-0061	POLY BAG	1
13	IVA007006-00140	SOFT BAG	1
14	IVH002001-0016	SOFT BAG	1
15	VRC303001-0010	RCA CABKE	1
16	VSC000002-0010	SCART CABLE	1
17	YOM100143-0002	OWN MANUAL	1
18	YOM100143-0002	GUIDE MANU SET UP GAUIDE MANUAL	1